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Absenteeism among doctors in the Bangladesh health system: What are the structural drivers?¹



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ABSTRACT

Despite considerable investment by the Bangladesh government in measures to strengthen accountability and transparency, absenteeism among doctors remains a barrier to the achievement of Universal Health Coverage. Recent innovations in anti-corruption theory point to the importance of acting on the structural drivers of absenteeism and argue for approaches that are better able to take local and national level context into account. In this qualitative study, we sought to understand the socio-economic and political structures that drive absenteeism among junior doctors in rural health facilities in Bangladesh. We conducted 30 purposively sampled, in-depth interviews with doctors in three divisions of the Bangladesh Health system, (Sylhet, Barishal and Dhaka) the majority of whom worked in medical college hospitals and sub-district facilities. The data was analysed using both theory and data driven thematic analysis. The results explore the ways in which poor local social relations and working conditions, and threats to career progression drove junior doctors to seek ways to leave rural facilities. Their absence was facilitated by weak regulatory mechanisms, bribery, and socio-political networks. These findings reveal how doctors' absenteeism can be traced to structural issues in the health system and socio-political networks that shape access to resource more widely in Bangladesh. Providers with power and access to networks can be absent for longer periods, overburdening and de-motivating their colleagues who lack connections and thus remain in post. While little can be done about longstanding features of Bangladeshi society, those in authority in the health system can take measures to address existing problems in the weak infrastructure and work environment, including measures for career progression. These are expected to support collective action by the doctors who are unable to make use of powerful social and political networks.

1. Introduction

Health systems around the world entail huge resources, are complex and fragmented, incorporate large numbers of actors and globalised supply chains for drugs and medical devices. These characteristics make them particularly susceptible to corruption with devastating consequences for access, quality, equity, efficiency, and efficacy of health services (Vian, 2008). Higher levels of corruption have been found to be associated with poor health within all socio-economic groups across the

lifecycle, in 20 African countries (Witvliet M.I. et al., 2013). Recent evidence suggests that corruption is rising in south and south-east Asian regions (Transparency International, 2014; Naher et al., 2020) and that it represents a major barrier to the realisation of the Sustainable Development Goals, including universal health coverage (Onwujekwe et al., 2019).

The United Nations identifies five common forms of corruption within healthcare: theft (of money, medicines and consumables); demands for informal payments of bribes; inappropriate referral and

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diversion of patients from public to private facilities; inappropriate prescribing and the provision of misinformation and unauthorised absenteeism among staff, (Gaitonde, R. 2016; Onwujekwe et al., 2019). In Bangladesh, the subject of this paper, the government identified absenteeism of doctors as a critical barrier to healthcare delivery, particularly in rural areas in 2011 (Government of Bangladesh, 2011). Measures to manage absenteeism have included the introduction of biometric fingerprint scanning in all sub-district and district-level government hospitals and making unannounced bimonthly calls by government officials to supervisors in healthcare facilities (Dhaka Tribune, 2015). Research data on absenteeism is scarce, but suggests that absenteeism among doctors and nurses, ranges from 7.5 to 40.0 percent on any particular day (Chaudhury and Hammer 2004; USC and ACPR 2012). Publicly available health systems data (taken from biometric fingerprint scanners) suggests that absenteeism among doctors continues to be a very significant problem across the country (see http://103.247.238.92/dgh seams/attend/professional_category_wise.php).

Within global public health, there has been some reluctance to label absenteeism corruption (Kisakye et al., 2016; Rachel et al., 2012, Sadananda, S. and Bhat, S., 2010) but recognition of the devastating consequences of absenteeism has led to renewed interest and approaches (Hutchinson, Balabanova, & McKee, 2019). At the same time, health systems researchers have recently redefined corruption as "The abuse or complicity in abuse, of public or private position, power or authority to benefit oneself, a group, an organization or others close to oneself in a way which diverts institutions from their core aims; where the benefits may be financial, material or non-material." (Hutchinson, Balabanova, & McKee, 2020; Gaitonde et al., 2016). Health systems researchers have also begun to explore new ways to tackle absenteeism within health systems that are less concerned with implementing universal up-scalable interventions and more interested in finding "locally tailored interventions born from a deeper understanding of local dynamics" (Gaitonde, 2019), see also Blake & et al, 2021; Onwujekwe, 2019; Hutchinson et al., 2020). In other sectors, the reworking of the research agenda on anti-corruption has shifted the focus away from the idea of corruption as a moral or individual failure and towards structural constraints that drive rule breaking and rent seeking (Khan, 2012; Khan et al., 2019; Marquette & Peiffer, 2015; Levy, 2014). One of the best developed new anti-corruption frameworks that is being taken into health systems research is by the SOAS-ACE research consortium (Khan et al., 2019). It posits that if an anti-corruption intervention is to be successful it must a) act on the economic, social and political drivers of corruption and b) identify actors who would support an intervention to stop rule breaking among their peers (Hutchinson et al., 2020; Khan et al., 2019).

The development of these contextually appropriate interventions for health systems demands a new focus for anti-corruption research so that the conditions that may make rule breaking a necessity for the system to function may be understood, and a nuanced account of the relationship between health systems structural constraints and informal practices and corruption developed (Hutchinson et al., 2019, 2020). As part of a larger project seeking novel, feasible, and high impact ways to tackle absenteeism in rural health facilities in Bangladesh, we conducted qualitative research to describe the ways in which social, political and economic structures, and health systems factors shaped practices of absenteeism among doctors in rural Bangladesh and to explore, how opportunities for absence were distributed among doctors and why they were distributed in this way. Findings of the study will inform the development of an anti-corruption strategy that can recognize and address the difficulties that many doctors face in rural areas in Bangladesh.

2. Background and methods

Bangladesh has a pluralistic health system with formal public, private and NGO providers and informal private providers of traditional and biomedicine. The Government is responsible for the public provision of comprehensive health services and provides preventive, and curative services (Ahmed et al., 2015). The health care infrastructure under the Directorate General of Health Services (DGHS), MOHFW at national level are provided through the specialized hospitals, institutions, at division level-divisional medical college hospitals, at district level-district hospitals. At sub-district (upazila) level the service is provided through upazila health complexes (UHCs), at union level through union sub-centres (USCs) and union health and family welfare centres (UHFWCs). The MOHFW has established community clinics (CCs) at ward level each serve an average of 6000 people (NIPORT 2017).

Bangladesh has made notable improvement in health infrastructure and substantial improvements in key health indicators such as life expectancy and immunisation coverage, infant mortality, maternal mortality and fertility rates (Ahmed et al., 2015; Chowdury et al., 2013; Hassan, Fahim, Zafr, Islam, & Alam, 2016). Despite these achievements, the health system continues to suffer from inadequate funding and human resources, and poor infrastructure and logistics; national health policy suggests that budgetary allocation for health care needs to increase substantially, expenditure in proportion to total public sending reduced from 6.2% to 4.04% over 8 years from 2010 (Hassan et al., 2016). The Bangladesh public health system faces major staffing problems with shortage, maldistribution of workers and poor retention (Ahmed et al., 2011; Darkwa & et al, 2015). In 2012, twenty-seven per cent of sanctioned public posts for doctors were unfilled (DGHS, 2012). The latest health facility survey (2017) showed that the percentage of the sanctioned physician posts filled is lowest in the lower-level primary care centres (union-level facilities, 15%), and that in district and upazila facilities (higher level facilities) 53% of posts were filled (NIPORT 2017). As in other countries in the region, the challenges are greatest in remote rural areas (Belita et al., 2013; Darkwa & et al, 2015; Joarder et al., 2018), in 2015 the doctor-to-population ratio was 1:15,000 in rural areas compared to 1:1500 in urban areas (World Bank 2015).

2.1. Study setting and sites

This study was conducted in three purposively selected divisions; Sylhet (northern), Barisal (southern) and Dhaka (central, capital). Sylhet and Barisal were chosen as the divisions with the first and third highest health worker vacancy rate, a factor which will be exacerbated by absenteeism. Sylhet's vacancy rate is 42.45% in the country and Barisal has the third highest (32.86%). Sylhet division is the northeastern division of Bangladesh with a population density of 980/km² (2,500/sq mi). Barishal division is located in the south-central part of the country, it has an area of 13,644.85 km² (5,268.31 sq mi), and a population of 8,325,666 with population density of 630/km² (1,600/sq mi). Dhaka Division is an administrative division within Bangladesh. In Sylhet and Barisal, the interviews were conducted in two settings; at divisional medical college hospitals and at sub-districts UHCs in each division to have comprehensives of data. Sub-districts were selected purposively taking into consideration poor performance in health indicators, distance, accessibility and feasibility to researchers.

Dhaka is the capital city of Bangladesh and also the largest city as well of the country. It comes among the 10 most populous cities of the world. The Dhaka division constitute with an area of 31,051 km and has a population at the 2021 Census of 21,741,005. In Dhaka division the interviews were conducted among doctors working in tertiary training and specialized hospital, who had previously worked in rural areas and who were able to reflect on their experiences of working in rural areas and transferring to an urban setting. The study areas and sites were selected with consideration given to urban and rural characteristics in order to maximise our understanding of the diverse practice of absenteeism across different areas.

2.2. Study design, selection of participants and sample size

The study used a cross-sectional qualitative research design and critical realist approach (Bhaskar, 1975). The study population included

public health care facility doctors who have experiences (minimum two years) of working in rural healthcare facilities in Bangladesh. At divisional medical college hospitals and UHCs, the doctors were selected purposively using convenience sampling based on the availability in the facility and doctors' willingness to participate in the study. Interviewees from training hospitals in Dhaka were selected using snowball sampling of doctors who had recent experience of working in the UHCs in different parts of the country, this subset included two respondents who had left the health system. In order to ensure diverse perspectives on the issues, we purposively sought different respondents from different level, such as senior specialist doctors, junior general practice doctors, and mid-level doctors. The study also included doctors in facility in-charge positions to enable the analysis of administrative issues.

In each division, data was collected by a team of four experienced (Master's level) public health researchers with extensive experience in qualitative research. The team was supervised by a public health researcher (NN) with a medical background who trained the interviewers on the IDI guide. The researchers visited the selected health care facilities to identify potential interviewees. Participants were briefed on the objectives and modalities of the study to allow for their informed consent and voluntary participation. Fifteen doctors refused to take part citing a lack of time to answer the questions and busy work schedule. Those who agreed were asked to schedule a date and time and place convenient for them. In Sylhet and Barisal all the doctors requested that interviews take place at their health facilities. In Dhaka division, some participants, some requested interviews to be conducted away from the healthcare facilities at their homes or private clinics.

The IDIs were all held in Bengali and used a semi-structured interview guide which focused on eliciting a rich description of experiences of working and living in rural positions, relations with local residents and care seekers, career prospect, regulatory mechanisms and finally feasible solutions to address doctors' absenteeism. The guideline was piloted among a five physicians working in Dhaka to validate the topic guides, ensure that the questions asked were clear and easy to understand, to identifying missing areas of the study that had not been captured in the questions, and to ensure that the interview would not take an unnecessary amount of time to conduct. The guideline was revised and finalized incorporating feedback from the pilot.

Interviewers asked doctors to refer us to their colleagues who had recent experience of working in a rural facility and who would be willing to discuss the informal mechanisms through which they had sought transfer from one setting to another. Table 1 summarises the location and number of IDIs in each phase of the study.

2.3. Data analysis

With the respondents' approval, interviews were recorded, and a note taker also provided handwritten notes during the interviews. Full

transcripts of the interview were prepared from these records and notes in Bangla and checked over by the senior researcher for accuracy and consistency. Full transcripts were then transcribed in full using meaning-based (rather than literal) translation (Larson, 1984). Each transcript was read by the three members of the research team to familiarize themselves with the data. The researchers adopted a critical realist approach to the research. The coding was conducted in ATLAS.ti and relied on a mix of A-priori codes drawn from theory and previous studies (on structural health systems constraints including poor training opportunities and workload, and the influence of social, economic and political networks) and inductive, data generate codes (violence against health workers, poor relationships with local community members, lack of safety). Gale et al. framework method of analysis was used to synthesize data to themes (Gale et al., 2013).

2.4. Ethical concerns

Ethical clearance was obtained from BRAC School of Public Health (IRB reference no. 2018-02) and LSHTM (reference no. 14540). Approval to collect data in health facilities was provided by the DGHS and the Ministry of Health and Family Welfare (MoHFW). Informed written consent was given by each participant prior to commencing the interviews.

3. Results

A total of thirty IDIs were conducted in three divisions (Sylhet, Barisal and Dhaka); twelve from the division medical college hospitals, ten from four UHCs situated in Sylhet and Barisal divisions and rest eight doctors were from Dhaka with experiences of working in UHCs is recent years. Participants were mostly married, age ranged between 27 and 58 years. The majority (18) of the respondents were junior doctors who work as medical officer (MO); five were mid-level doctors positioned as residential medical officer (RMO) and upazila health and family planning officer (UHFPO) and seven were senior doctors in different positions like hospital director, assistant director, professor, and consultant).

The research findings fell into two broad, categories of action that included both theory and data driven codes: the drivers and facilitators of absenteeism. The first category included factors in the local community, the health system that made it difficult for doctors to stay in rural areas. The second category included factors such as social and political networks that enabled or facilitated absenteeism.

3.1. Drivers of absenteeism

3.1.1. Poor social relations and violence in the local area

Almost all doctors interviewed complained that patients numbers greatly exceeded the capacity of the doctors to respond to the demand,

Table 1Study area, type of facility and number of IDIs.

Phase	Division	District/Zilla	Sub-district/Upazila	Facility type	No. of Interviews
1st Phase	Sylhet	Shunamganj	Chatak	Upazila Health Centre	3
	Sylhet	Shunamganj	Derai	Upazila Health Centre	2
	Sylhet	Sylhet Sadar		Division Medical College Hospital	8
1st phase sub-total					13
2nd Phase	Barisal	Barisal	Baufal	Upazila Health Centre	2
	Barisal	Patuakhali	Mirjagonj	Upazila Health Centre	3
	Barisal	Barisal sadar		Division Medical College Hospital	4
2nd phase sub-total					9
3rd phase	Dhaka	Dhaka		DGHS	2
				Specialized Hospital	1
				Tertiary Training Hospital	2
				Ex-BCS	2
				Medical College Hospital	1
3rd phase sub- total					8

creating a chaotic and stressful environment that doctors lacked administrative authority to manage (for example, "Ten patients enter in my room and then all of them want me to see them right then. No one wants to wait." Male junior doctor form Barisal). Doctors reported how patients were unwilling to wait for their turn to see the doctor, and especially those who benefitted from patronage of locally powerful individuals (for example, "... influential people came and said, you have to treat my patient first leaving other patients and I had to do it". (Female junior doctor from Dhaka).

The doctors' workload was also augmented by the number of people who demanded that doctors authorise official documents with their seal and signature (for example, "We have other government officials who can do it [sign documents] but people do not go there, maybe those officials are not easily accessible like doctors or people are afraid of them but not of doctors". Male junior doctor Barisal). In addition, when there had been a violent altercation, accident or argument within the local area, then politically powerful families would often pressurise doctors to issue false medical certificates, or they would demand that they admit patients or refer them to other facilities so that injuries could be reported to the police. This enabled the injured party to seek compensation (for example, 'both party and counter party put pressure on us for a certificate of grievous injury and of a simple injury, respectively.' Male junior doctor from Barishal). These politically connected people often also demanded that doctors to make home visits at late hours, leaving the patients at the health facilities unattended.

Doctors also described assaults occurring within health facilities, as well as frequent threats in person and over the phone, some of which would leading to cases of serious violence against staff. The perpetrators were seen by many junior doctors as able to act with impunity and this was especially the case if they had the support of other people within the local area. The most striking example documented was when local residents had tried to burn down a doctor's house, an act that lead to other doctors leaving the facility.

"Our medical officer was attacked by local people. They tried to burn his house. The local people restricted movement of the doctor's family; they could not go out of their home. His niece could not go to school to take an examination because her movements were restricted by the local people. He filed a police case, but eventually had to withdraw and the case was dismissed due to the pressure from the local community. There was no support from the facility authorities. This incident had such a bad impression on the other doctors that later two new doctors who were transferred to our facility refused to join and somehow managed to change the transfer order and did not join this facility (Male mid-level doctor from Barisal

In contrast, those junior doctors who were satisfied with their postings stressed the importance of the good social relationships that they had with locally powerful families as a factor that facilitated their stay and practice in rural areas. These doctors as mentioned earlier were from the local area and well connected, (for example, "We are from local area our family members are well known in the locality. My uncle was businessman and he was well connected to the local government people." (Female junior doctor from Rajshahi).

3.1.2. Poor accommodation and a lack of security

In this context of fractious and potentially violent interactions between the doctors and members of the local community, poor accommodation and a lack of security were of considerable concern to junior doctors. Accommodation for doctors and nurses which was usually provided within the Upazila facility compound, was described it as inadequate (without reliable electricity, water or gas supplies), lacking a dedicated security guard, and in some places with no perimeter fence. This left doctors vulnerable to theft (for example, "Security is not good. We have no security guard, sometimes patients and attendants broke into our house, even if I was not on duty. So, doctors prefer to stay outside the compound". Male junior doctor from Sylhet).

Female junior doctors were particularly concerned about being assaulted within the health facility and sought to protect themselves by living outside and travelling in to work every day. In some places, doctors borrowed cars and paid for petrol themselves, incurring additional costs. Where transport was difficult, one female junior doctor was told by a senior colleague that she should come and sign in to work in advance of her shifts and then could remain absent to avoid the trouble of regular travel in and out of work.

For those working outside Upazila health complexes, at union or community level in sub-centre or community clinic, housing is more difficult and often not linked to doctors' posts. One female respondent from Dhaka who left her government job, described how she had been transferred to a community clinic in a hard-to-reach area in Barisal district where she had to travel by boat to cross the river to reach her workplace. There was no housing available for her to stay in – the community clinic was situated in a remote village with no hotel or house to rent so she had to stay, initially, in a hotel in the division city and later a distant relatives' home.

"I used to travel by a boat (trawler) to cross the river and then take a paddle van, there were no bus even, and the roads were that bad. The community clinics did not have any infrastructure. There was no dormitory to stayI asked the local people whether I could rent a house there and stay there. They said, "Look madam this is a village, there is no such house for rent" The locality was not secure, I was an outsider and completely unknown. My son was only seven months old that time, how and where could I stay with the infant there? So, for one week I stayed in the hotel and used to travel to workplace daily crossing the river and then taking the paddle van."

(Female doctor, Dhaka, no longer working).

Female doctors also felt very unsafe during night shifts. Male colleagues could be supportive and would sometimes offer to cover for them but junior doctors also described paying support staff so that they weren't alone in the facility during the night, and one took her father with her on these shifts to protect her. This was not seen as desirable or sustainable and as one junior doctor argued, the lack of security had long term consequences for the Bangladesh health system "More female students are studying medicine but if there is no safety at work, we cannot retain them. The authorities need to look into these issues." (Male junior doctor from Dhaka).

3.2. Difficult working practices and challenges of career progression in rural facilities

Most of the respondents reported shortages and stock-outs of medicine, equipment and other basic supplies in rural facilities. One junior female doctor reported how 'Medicines are unavailable due to distribution irregularities' (Female junior doctor from Sylhet) Poor or absent diagnostic equipment also meant that many patients had to be referred on, while the situation was especially problematic at sub-centres and in community clinics since those hardly had any necessary equipment and logistics needed to provide basic care. Despite having the expertise and willingness to practice, doctors struggled to utilise their skills or gain expertise, "I am a gynaecologist but I can only provide symptomatic treatment here, what is the use of being here?" (Female senior doctor from Sylhet).

None of the health complexes that our respondents worked in had a full quota of doctors or support staff to carry out these tasks. In some cases, doctors reported having recruited additional staff themselves and paying their salaries out of their own pockets in order to keep the facility clean and manage the queues of patients. Many doctors described how they struggled to complete their work during an 8-h shift, instead working long hours to keep the facility running, attending to between 50 and 100 patients in a day.

"There are nine sanctioned posts for doctors but four are absent. They are not absent actually; the authorities could not give posting anyone

in these four posts. So, the posts remain vacant. And because of these vacant posts sometimes we even have to do a 56- hour emergency shift." (Male junior doctor from Sylhet)

A completely different situation pertained in facilities near the capital city. One respondent described her experience of working in a UHC near to Dhaka, the facility had so many doctors that sitting arrangements fall short. As the UHC was near to Dhaka, it already had 22 doctors, we didn't have place for sitting. We, 3 doctors use to share one table and treat patients. (Female junior doctor form Dhaka)

Given the long and intensive working days, junior doctors also had to find time to study if they wanted to progress in their careers. Most respondents described how their heavy workloads in health centres gave them very little time to prepare (for example, "I don't get the opportunity to study and prepare. No one can study here in this environment" Male junior doctor from Barisal). A further problem facing those in rural areas was the need to travel to a city for both preparatory classes and the exams, as there are no opportunities for distance learning.

According to policy, doctors cannot apply for a transfer within the first two years of a compulsory rural placement. They can then apply for a transfer through their facility manager to the civil surgeon within the office of the divisional director (DD). However, junior doctors interviewed described the importance of lobbying using social, political and sometimes profession networks more to the central and or divisional level. Beyond the frustration that this created, it also drove absenteeism as lobbying, and in some cases to permit payment of bribes, had to take place face to face. As one female junior doctor explained:

"I met the civil surgeon again and asked for his advice [on a transfer out of a rural area]. He said, 'Being the authority, I cannot advise you directly to leave the facility'. Then I actually understood what he meant to say. I went to Dhaka for lobbying without taking any leave." (Female junior doctor from Dhaka)

One female doctor shared her own experience of using family background for a better transfer. 'My father took me to the Divisional Director (DD) office and DD helped me with the forwarding to the Directorate General (DG) office. DD of Dhaka DD office instructed his staff to find out vacant place and immediately instructed to give me posting at...' (Female junior doctor from Dhaka).

3.2.1. Facilitators of absenteeism

3.2.1.1. Weak regulatory mechanisms. All of the facilities that we visited had functioning biometric scanners. Doctors were supposed to provide a fingerprint when they entered and exited the health facility, as well as a signature.

While some welcomed the biometric system a good means to monitor attendance, as it sent monthly reports to the central level, many saw it as ineffective. Some doctors would get other colleagues to cover for them and others would simply sign in and leave. As one junior doctor explained, "I got admitted in coaching for post-graduation. Once I gave my attendance in the healthcare facility at 9 a.m. than then went to Dhaka to attend the class test in the coaching". (Female junior doctor from Dhaka)".

An unauthorised absence for more than three consecutive days was expected to result in formal action (a written warning) by the facility manager. If there was no response or a poor excuse, then the facility manager would inform the higher authority's level. Annual leave or salary payments could then be deducted as punishment. Formal disciplinary action could be taken in cases of prolonged absences, including suspension, but the doctor would continue to receive their salary (although with no allowances or increments) until a hearing at central level. If the accused doctor could show any valid reason for her/his absence then the suspension would be cancelled. The ultimate sanction in cases of long-term absenteeism would include authorities issuing a legal notice dismissing the doctor which would be published in newspapers.

This process would be expected to take between two and four years to complete. One female junior doctor from Rajshahi shared her experience of the process. She took leave but then did not re-join, leaving the country without informing the authorities. She reported how her family members told her that show-cause letter arrived at her home address but she advised them to ignore them. Thus, she neither knew what action was taken against her by the ministry and nor did she try to find out. When we talked to the junior doctors about these mechanisms, few believed that they had any impact. For example,

"Their [the junior doctors'] excuse was they need to go to Dhaka for study and preparing for the exam, we were overloaded with work. They applied for leave, the [Upazila Health and Family Planning Officer] did not allow but they even didn't bother, they just left anyhow." (Female mid-level doctor from Dhaka)

Another respondent added that, in the majority of cases, warning letters did not reach the doctor, absent doctors did not bother to respond, or they gave a poor excuse for their absence. Some put this lack monitoring down to a general system failure: "These letters usually do not reach to address or may give a response like suffering from back pain, and authorities accept such responses, suspension means the doctor will have the basic salary and will not come to office for the mentioned period of time. This is the benefit of the government job." (Female junior doctor from Dhaka). While these comments suggest that most doctors could be absent with impunity, not everyone found it so easy, as we describe next.

3.3. Effective socio-political networks and bribes

Doctors with connections to politically powerful families were reported to be able to be absent without sanction and could easily find a new placement in an urban facility. However, those lacking connections struggled even to organize holiday. One female doctor from Dhaka who had previous experience of working in an Upazila health complex in Rajshahi division contrasted her experience with that of a well-connected colleague. Her requests were denied but her female colleague could remain absent for long periods during her compulsory rural placement. Our respondent considered it likely that her colleague was able to get away with this because she had made an unofficial payment ("She managed to remain absent; she used political network and might have paid unofficially also. She was not punished for her absence.", Female junior doctor from Dhaka).

This was supported in other comments, with many junior doctors describing colleagues who had either never arrived at their post or who had only stayed for a short time. As one explained, "I remember one case, a female gynaecology doctor, who was transferred here. She was niece of one of our current ministers... She joined here and attended office only for three to four days and then left and never came back." (Male junior doctor from Sylhet). One female respondent had relied on her cousin's political network to help her secure a period of leave, which enabled her to take up a position in Australia without having to formally resign her position in the Bangladesh health system.

I know I'm not going to stay here as I was trying for migration to Australia so I was not bothered about the system. I knew I have to use some political influence. My cousins' husband is a big businessman and a strong supporter of current govt. He has direct connection with many of the current ministers. I requested him, I have no idea how and what happened next. Then I came to know that my leave has been granted from the ministry'. (Female junior doctor from Dhaka)

These doctors often complained bitterly about the difficulty of taking leave and said that they often had to work extremely hard to cover for absent colleagues and vacancies. Nor did they have contacts within the health system whom they could lobby and bribe to get a transfer or promotion (for example, "I do not want to stay here anymore I want to go to Dhaka and but as I do not have any powerful network or anyone at senior level I fail to manage", Male Junior doctor from Barisal).

One respondent could not prepare for the post-graduate exam as her posting was in a hard-to-reach area and, although she visited the Directorate General of Health Services (DGHS) office repeatedly, she did not have any social or political network to lobby at central level for a transfer. This young doctor ultimately resigned from her job.

"I could not even manage to speak to the [Personal Assistant] of [Directorate General] sir. The office peons said there are many like you waiting here, it is not that easy, please go and sit. Maybe I could have survived if I could do the lobbing and use the networks successfully to manage the transfer." (Female junior doctor from Dhaka).

4. Discussion and conclusion

Unauthorised absence of employee from the workplace is one of the most common forms of corruption among frontline staff. It is a major cause of staff shortages in healthcare settings and has a clear negative effect on the delivery of quality healthcare services. Despite interventions over many decades, absenteeism remains a longstanding problem in Bangladesh, particularly among doctors to rural locations. Drawing on new anti-corruption theory, we sought to understand the social, political and economic factors that drive absenteeism among junior doctors working in the rural areas of Bangladesh.

All the participants in the study found the rural placement difficult to cope with, and most attributed this to problems within the health system and the socio-political context. A range of factors influenced their desire to leave the rural area and these were similar to those identified in a study on retention in rural districts in Pakistan in which poor remuneration and work environment, lack of minimum residence facilities, political interference, supply shortages and poor-quality medical facilities contributed to lack of motivation among doctors (Shah, S.M., et al., 2016). In India, a nationally representative survey found the highest rates of absenteeism among doctors posted to remote facilities that lacked infrastructure and equipment (Muralidharan, K., et al., 2011). Poorly funded rural posts were also found to be demoralising among doctors in Ghana, where although doctors described themselves as willing to serve in a rural community, they felt challenged by the system that had invested in facilities but had not expanded staff numbers to cater for larger health centres and hospitals (Amalba, A., et al., 2018).

In our study, of the twenty interviewees currently working in rural areas, all but four expressed a strong desire to move away from the rural area that they were currently or had previously worked in. Almost all doctors we interviewed described threats of violence and poor relationships with the community as important factors that underlay their desire to leave their posts. Studies in India and China have also reported that physicians faced violence and humiliation from the community and that this was a common and alarming situation (Ambesh, P., et al., 2016, Kar, S.P., et al., 2017). In our study, this context of fractious and potentially violent interactions between the doctors and members of the local community, security was a major concern particularly for female doctors. The increasing number of female physicians in health workforce, adds further pressure to the government to provide secure work environment particularly for physicians in rural areas (Hossain, 2019). In our study, the four interviewees who were content working in rural areas in our study were originally from the areas in which they worked and all described how they had managed to build good rapport with the local residents from the beginning of their placement. Elsewhere findings suggest that health staff from rural areas are more likely than their counterparts with urban upbringing to be retained in rural positions (Darkwa & et al, 2015), it could be that one of the reasons for this is that staff from the areas in which they work feel safer than those who are social outsiders with no local networks.

In addition to concerns about safety, for many junior doctors their positions in rural health centres offer little opportunity for career progression. Lack of career pathways coupled with poor human resource policies, career pathways, performance appraisal and monetary benefits led to a lack of motivation among junior doctors in rural areas in Pakistan (Shah, S.M., et al., 2016). Findings of the study revealed that the promotion process in Bangladesh is complicated and competitive: prolonged service within a rural facility is not a criterion for promotion and instead career progress is based on success in an arduous exam process (foundation training, a departmental exam, senior scale exam (for promotion to next level) and post-graduation exam. There were few formal pathways away from the rural health centres and the system by which doctors move along the career path in the early stages of their career is often opaque.

Although posting and transfer of health personnel, placing the right health workers in the right place at the right time is a core function of any large-scale health service. it is known to be a complex phenomenon (Garimella & Sheikh, 2016). Studies conducted in Nigeria, Pakistan and rural Uganda shows that the measures taken to reduce absenteeism in rural facilities are often ineffective due to failures of implementation and structural constraints (Agwu et al., 2019; Nawaz et al., 2018; Tweheyo, Reed, Campbell, Davies, & Daker-White, 2018; Tumlison et al., 2019).

Traditional views of corruption tend to see those who remain in post as more moral or ethical than their absent counterparts (Vian,T., 2008). In contrast, our study showed that most doctors wished to be away from the facilities but that the 'opportunity' for Bangladeshi doctors to be away from their post without sanction was unequally distributed through social networks. Similar observations were made in a study in India when the formal transfer guidelines are undermined by a parallel system in which desirable posts are distributed through political connections and via the payment of bribes (Purohit B., Martineau T., Sheikh K. 2016).

Effective strategies to tackle corruption, including absenteeism are elusive. A systematic review undertaken to identify effective mechanisms to mitigate absenteeism among health workers in low- and middleincome countries found that interventions at the level of the organisation were more effective, with most countries adopting a package of measures (Kisakye, A.N. et al., 2016). According to the SOAS ACE anticorruption framework, an anticorruption strategy will only be successful if it has the support of some of the actors who will be subject to its regulation. In our case, that includes junior doctors themselves. In Bangladesh, we see that those who have very strong socio-political networks (well connected to socially and politically influential peoples) are able to be absent without sanction and would be unlikely to support any retention strategy. Those with no or poor access to such networks, who suffer from their colleagues absence as they have to do their work, would be more likely to support a strategy to curb absenteeism. There were, however, also doctors in our group of interviewees who had limited access to the social and political networks through which placements are distributed and who find the process of lobbying and bribing officials for transfers both difficult and time consuming.

5. Policy implications

Both the Bangladesh Government and Anti-corruption Commission in Bangladesh relies on transparency and accountability measures such as biometric testing and spot checks to curb absenteeism in the health system. Our findings suggest that if an anti-corruption strategy is likely to be effective to curb absenteeism among doctors in Bangladesh, it must recognize and act on the difficulties that these doctors face in rural areas. If problems such as poor housing, fear of violence, lack of opportunity for study could be overcome effectively, then this could enable those doctors who find it difficult, time consuming and expensive to organize alternative placements to stay for longer in the rural area. With limited resources, the next question for policy makers is which of the problematic areas identified in this studies should they tackle to enable more doctors to stay in their rural health posts? The second piece of work within this research project drew on these research findings to implement a discrete choice experiment offering junior doctors' different types of duty stations

to find out which areas should be tackled first and which areas once tackled would be most likely to incentivise junior doctors to stay at work. Its findings will offer the Bangladeshi government guidance that can support their drive against absenteeism and realisation of equitable access to quality health services across the country. The study also adds to the menu of options available to policy makers and champions in other LMICs designing policies to extend coverage.

6. Limitations and strengths

The study was undertaken with doctors and therefore the findings are unlikely to represent all cadres of frontline health workers. We gathered interview data and it is therefore likely that some doctors failed to report their own or others strategies through which they were absent from their health facilities. Finding absent doctors can also be difficult and have an impact on the participants who are able and willing to undertake interviews. Following interviews with doctors in our first round, we agree to add the group of doctors from Dhaka who were no longer in rural positions. This enabled us to have a group of research participants who were able to be candid about their experiences of using informal networks and bribes to secure an urban position.

Ethical statement

Ethical clearance was obtained from BRAC School of Public Health (IRB reference no. 2018-02) and LSHTM (reference no. 14540). Approval to collect data in health facilities was provided by the DGHS and the Ministry of Health and Family Welfare (MoHFW). Informed written consent was provided by each participant prior to commencing the interviews.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ssmqr.2022.100089.

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