

A Perspective on Patient Accessibility to Healthcare Service Among Different Countries

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Abstract

Background: Healthcare is the most essential and highly demanding service requirement of the society. The rising population, enhanced awareness on health issues by the public, and the emerging new diseases put healthcare service under a great challenging situation. Wait time in healthcare service is one of the most crucial factors determining the success of healthcare service throughout the world. The work hours and working pattern of medical practitioners differ invariably across the countries and is influencing the wait time of the patients. Therefore, this study has been carried out to assess the influence of doctors' work time and pattern on the wait time of the patients.

Methods: The ratio of doctors to 1000 citizens, number of working days for doctors per week, average working hours of doctors per week in private clinics/hospitals have been considered as the parameters for assessing the doctors' contribution in addressing the healthcare issues and compared across BRICS countries and a few other countries. The wait time has been categorized as the wait time for getting an appointment, for consultation within clinics/hospitals, for surgeries, and for non-life-threatening emergency ward admissions. These data have been collected from the public domains and published articles and are compared across different countries.

Results: India is deficient of qualified physicians as per the recommended ratio of doctors: citizens by the WHO (World Health Organization), whereas all the other BRICS (Brazil, Russia, India, China, South Africa) countries have the ratio above the minimum requirement set by the WHO. The contribution of Indian private doctors is top ranking in terms of total work hours per week, and also available on all days of the week, with 42.86% of the private doctors providing consultation services throughout the week. India ranked fourth with China<Brazil<UK<India<Russia<USA<SA in the ascending order of wait time duration in private clinics. The wait time for surgeries ranged from 4.1 days to 4.4 months across different countries surveyed, where India recorded the least.

Conclusion: The outcomes of the present survey, has confirmed that Indian private doctors attend to more patients within a short period of time, as the waiting period for appointment and consultation is the shortest in India when compared to other countries. The deficiency in the number of doctors and the overwhelming patient population in India are being addressed by the longer work hours and consultation on all seven days of the week by a majority of the private-sector doctors in India.

Key words: Appointment, consultation, surgeries, wait time.

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I. Introduction

Healthcare service is the most essential service for the society. The pattern and extent of this service vary invariably within the country and across the countries. Despite the technological developments in diagnosis and patient care processes, healthcare service still remains challenging, with respect to patient outreach and patient satisfaction world over. The main determining factor of patient satisfaction is identified as the wait time^{1,2,3}. The wait time in the healthcare system itself is complex and involves different phases. A real insight into the overall wait time of a patient to access consultation and treatment is not worked out systematically anywhere, though it is one of the crucial determining factors for the success of the whole healthcare service.

Most of the studies focus on the comparison of the healthcare service performance in relation to the economic parameters⁴. This article explores the state of affairs regarding consultation service by private doctors in different countries with a focus on their working time, working pattern, wait time of patients at various phases of consultation and treatment. The patient wait time for an appointment, consultation, and post-consultation processes have been compared among different countries using data collected from the public domains.

II. Methods

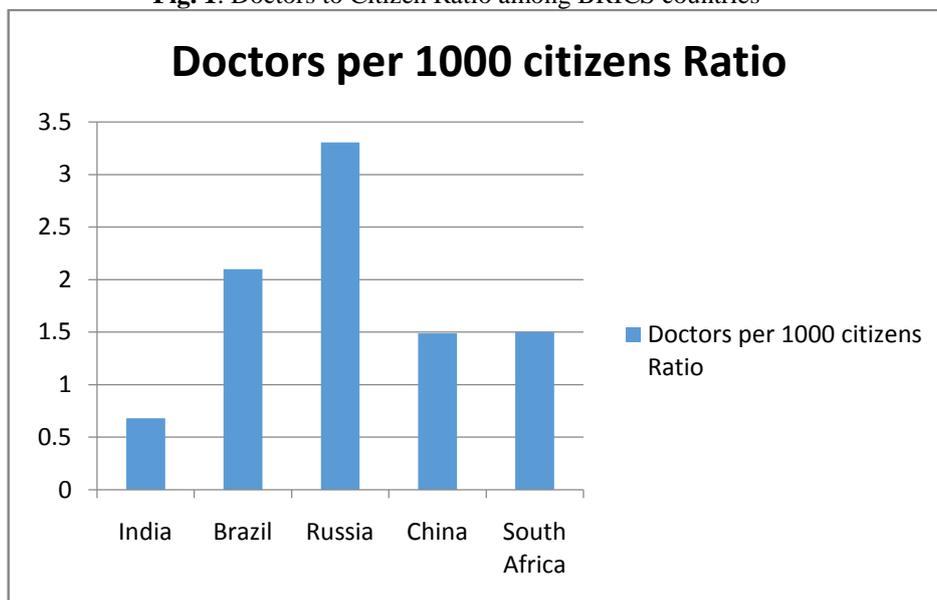
Different aspects of the healthcare service have been taken into consideration in this study for understanding the state of affairs in the system. In order to assess the availability of sufficient numbers of doctors, the ratio between the number of doctors to 1000 citizens has been considered and included. The number of working days for doctors per week, average working hours of doctors per week in private clinics/hospitals have been analyzed. The wait time has been categorized as the wait time for getting an appointment, for consultation within clinics/hospitals, for surgeries, and for non-life-threatening emergency ward admissions. These data have been compared across different countries. All data were collected from published information available on the internet sources.

III. Results

Doctor to Citizen Ratios

The WHO has set 1:1000 as the standard ratio between the number of doctors and citizens for ensuring accessibility of timely healthcare solutions to all. A comparison of the Doctor: Citizen ratio across the BRICS countries (Fig.1.) recorded the least ratio in India and is below the standard recommended by the WHO.

Fig. 1. Doctors to Citizen Ratio among BRICS countries^{5,6,7,8}



Working days of doctors per week

The working patterns of doctors in the private hospitals and own clinics provide an insight into the actual contribution of doctors to the accessibility and availability of healthcare service to the patients and hence included in this study. Comparison of the working days of doctors in the private sector in BRICS countries has shown doctors in the private sector working on all 7 days of the week in all countries, except Russia and South Africa (Table 1). In Russia private doctors work only 5 days while in South Africa they work for 6 days in a week. The workforce of private doctors rendering consultation service in terms of number of days per week has been compared across different countries in Table 2. Interestingly, working of private doctors on all seven days of the week is recorded only in India, and the percentage of those doctors are also very high.

Table 1. Weekly availability of private doctors in BRICS countries

Countries	Week day working	Saturday working	Sunday working	References
India	✓	✓	✓	9
Brazil	✓	✓	✓	10
Russia	✓	X	x	11
China	✓	✓	✓	12
South Africa	✓	✓	X	13

Table 2. Weekly working patterns of private doctors in different countries^{9,14,15,16}

Countries	Percentage of private doctors working on			
	7 days	6 days	5 days	Less than 5 days
India	42.86	46.43	3.57	7.14
Brazil	NA	20	60	<20
Russia	0	NA	NA	NA

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China	NA	NA	NA	NA
South Africa	0	NA	NA	NA
England	0	50	0	50
Italy	0	50	0	50

Weekly work hours of doctors

The extent of work done by doctors varies considerably across different countries. The average weekly work hours of Indian doctors ranked the highest among 5 countries compared. The least average work time is recorded in Italy. South Africa has emerged as the second-highest with reference to the weekly work time of the doctors followed by England and Brazil (Table 3).

Table 3. Comparison of weekly work hours of doctors

Sl No	Countries	Average work h/week	References
1	India	59.5	9
2	Brazil	32.4	17
3	Russia	NA	-
4	China	NA	-
5	S. Africa	45	13
6	Italy	28.6	16
7	England	33.25	18

Wait time for medical consultation and treatment

The wait time for patients seeking medical treatment is very important and involves several phases. Getting an appointment with a doctor for the consultation itself is a challenging task in most of the countries. Comparison of the average wait time for consultation with doctors in 5 countries comprising Asia, Africa, America, and Europe has confirmed the shortest wait time of 1 day in India and the longest wait time of 35.66 days in the UK (Table . 4).

Table4. Waittime for doctors' consultationin different countries

Sl. No.	Countries	Mean wait time (in days)	Reference
1	India	1	9
2	Brazil	18.16	19
3	Russia	NA	
4	China	NA	
5	S Africa	180	20
6	USA	29.83	21
7	UK	35.66	21.

The patients generally face wait time for meeting the doctor even after getting an appointment. The average wait time of patients in the queue for meeting the doctors, in the clinics/hospitals generally range between a few minutes to nearly an hour in different countries (Table 5).

Table 5. Comparison of consultation wait time in different countries^{9,22,23,24}

Wait time in minutes							
Type of doctors	India	Brazil	Russia	China	S Africa	UK	USA
Doctors in own private clinics (Average of all qualifications)	16.66 min	7.13 min	18.1 min	2.0 min	55 Min	9.22 min	21.07 min
Specialists/subspecialists in private hospitals (Average of all qualifications)	30.5 min	43.25 min	25 min	8.5 min	6 min	9 min	22 min

The real picture of wait time for consultation after reaching the clinic/hospital in India is presented in Table 6. In general, wait time in own private clinics of general physicians is very short, despite being overcrowded with patients. The specialist and subspecialist consultation wait time within the clinic or private hospitals is more, maybe due to the increased length of consultation time used for an individual patient by these doctors. The complexities of the patients probably account for the lengthy consultation time.

Table 6. Wait time for consultation with Doctors in India⁹

Type of doctors/establishments	Wait time for consultation in min
General Practitioner (MBBS) in own clinics	2
Specialist (MD/MS) in private hospitals	19
Specialist (MD/MS) in own clinics	18.33
Subspecialist MD/MS + in own clinics	42
Subspecialist MD/MS + in private hospitals	30

Wait time for surgeries

Wait time for surgeries in different countries varied widely from a few days to a few months, with India recording the shortest duration of 4.1 days and Norway recording the longest wait time of 4.4 months (Fig . 2). Comparison of the wait time of patients in non-life threatening emergency ward also has shown a similar trend with India recording the least duration of 1.73 h to a maximum of 3.13 h in West Indies among the three countries compared (Table 7).

Fig. 2. Wait time for surgeries in different countries^{25,26,27}

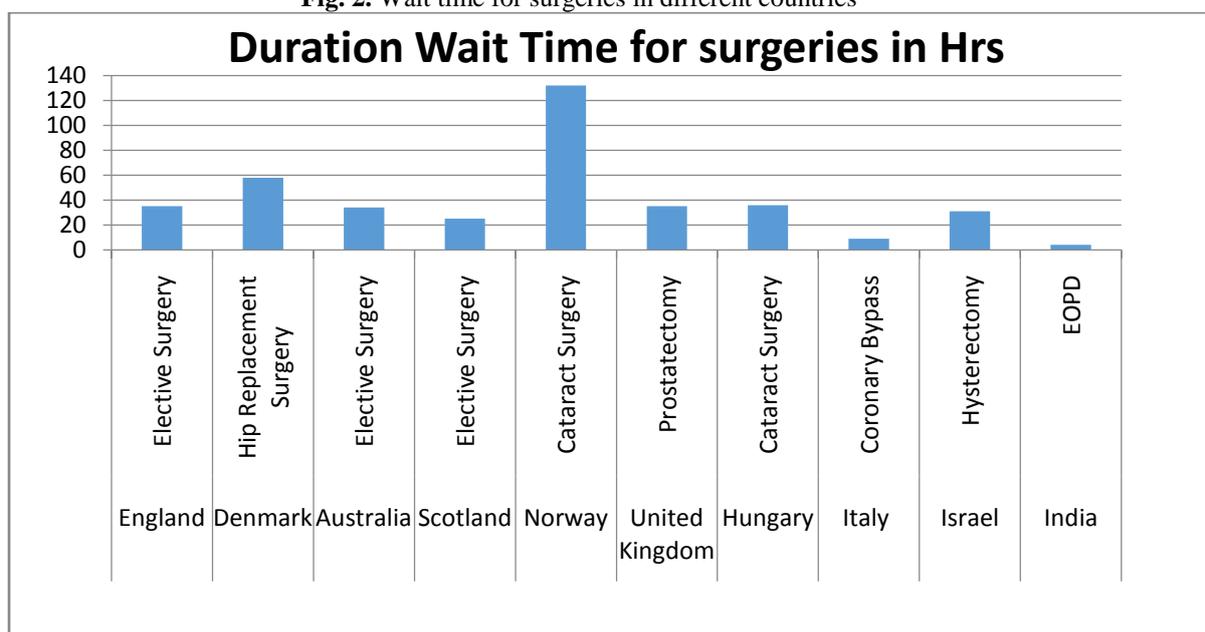


Table 7. Waittime in non-life threatening emergency ward in different countries^{28,29,30,31}

Sl. No.	Countries	Mean wait time (in h)
1	India	1.73
2	West Indies	3.13
3	Canada	2.75

IV. Discussion

The data presented in this article are pertaining to the private healthcare service providers except that of the doctor to citizen ratio. The corresponding data for comparison from other countries also refer to the private sector in each country. This study has been carried out considering the dominant role played by the private sector in the health care service in India, with a focus on private doctors. The key elements contributing to the healthcare service such as the ratio of Doctor: Citizens, working days of doctors, the pattern of doctors work on a weekly basis, work hours of doctors per week, and the wait time of patients at various phases of medical treatment have been considered for comparison and evaluation. The most fundamental factor in healthcare is the ratio of doctors to citizens and the recommended ratio by the WHO is 1:1000. But this study has observed that India is deficient in terms of qualified physicians, and has only 0.6 doctors to 1000 citizens. This ratio has been reported as 0.48:1000 by a study carried out with a practical approach, considering the attrition of practicing doctors due to retirement and emigration³². Interestingly, all other BRICS countries have ratios beyond the WHO recommended minimum level. The reasons for the deficiency of qualified medical practitioners in India has been attributed mainly to the wide gap between the rise in population and the rise in the number of doctors being qualified every year, attrition of registered medical practitioners due to retirement, emigration (for better salary prospects) and switch over to other professions³².

The working patterns of doctors have been viewed from two aspects, the overall availability throughout the week and the number of days per week the doctors provide consultation. In all the BRICS countries except Russia and South Africa, private medical practitioners do serve the patients throughout the week. However, none of the BRICS countries showed individual doctors practicing all 7 days of the week except in India, where 42.86% of the private doctors do provide consultation services throughout the week and 46.43% practice 6 days per week and the rest either provide consultation 5 days or less than 5 days per week. Exact data on this aspect is not available for the other BRICS countries. Among the European countries, 50% of the doctors practice for 6 days/week and the remaining 50% do offer consultation for less than 5 days per week. The average work hours/per week/doctor again showed highest in India followed by South Africa, and least in Brazil. Other studies also have confirmed that senior and specialist doctors in the private sector in Brazil are reported to work less than 20h/per week³³.

Getting an appointment with a medical consultant is practically difficult throughout the world. The mean wait time for an appointment in India is 1 day, while in other countries it ranged from weeks to months together, South Africa recording the highest wait time of 6 months. The next wait time for the patients is after reaching the clinic/hospital on scheduled appointments for meeting the doctor. In terms of consultation wait time for patients visiting clinics/hospitals, India ranked fourth with China<Brazil<UK<India<Russia<USA<SA in the ascending order of wait time duration in private clinics. Wait time in private hospitals in all countries are near equal or slightly more than to those of clinics in all countries except South Africa, where it is the reverse case. The wait time in India for general physicians in their own clinics is absolutely low when compared to that of specialists and subspecialists in their clinics/hospitals. This indicates a shorter the consultation time took by individual patients with the general physicians. This trend has been observed and reported²² from a large proportion of the world population.

Surgeries and non-life-threatening emergency cases are two more phases of healthcare services, where wait time comes to the forefront. The wait time for surgeries ranged from 4.1 days to 4.4 months across different countries surveyed, where India recorded the least. Similar to the surgeries, non-life-threatening emergency consultations also recorded the least time of 1.7h in India and a maximum of 3.13h in West Indies.

Most of the articles on the comparative assessment of the healthcare services across different countries often correlate the economic parameters with the quality of healthcare outcome, but not with the work contribution of the doctors or other healthcare workers. The latest analysis of the quality of the healthcare scenario across the BRICS countries⁴ in correlation with the economic factors have reported the best performance of the health care system in Russia, China, and rated Brazil and India and South Africa as the least performers. The study has established a statistically significant correlation with government involvement in healthcare expenditure, per capita GDP, per capita health expenditure, and industry share in GDP, of which the first two factors being strongly influencing the quality of healthcare services. However, the impact of the workload, working pattern, and turnaround time for consultancy with medical practitioners on the overall outcome of the healthcare service has not been given its due importance while analyzing the performance of healthcare service and information gathered are meager. The present study has established the outstanding contribution being made by Indian doctors working in private sectors to the overall outcome of societal healthcare in India, through extended work hours per week, providing consultancy service 7days/week, shorter wait time for an appointment, consultancy, surgeries, and other medical emergencies in private hospitals.

V. Conclusion

An attempt has been made to analyse the healthcare service across different countries focused on the contribution of doctors working in the private sector and how Indian private doctors counteract the deficiency of Doctor: Citizen ratio in India. While considering the outcomes of the present survey, it is quite obvious that Indian doctors attend more patients within a short period of time. The waiting period is shortest and appointments are available more readily and the consultation time also is short. The long waiting time and long consultation time working in other countries is not practical in India and is being addressed by the longer work hours and consultation on all seven days of the week by majority of the private-sector doctors.

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