

Electronic Health Records (EHRs) System in the Out-Patient Department of Government Hospitals in Dhaka, Bangladesh: A Reality Check on Current Perspectives

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BACKGROUND

Due to the environmental impact, there is a growing interest in switching to electronic health record (EHR) systems from the commonly used paper-based health records among healthcare professionals to offer patients with higher-quality treatment in many countries like the USA, the UK, Canada, Japan, China, Malaysia, Taiwan, and New Zealand offering automation, confidentiality yet multi-disciplinary collaboration (Fernández-Alemán et al., 2013, Menachemi and Collum, 2018 and Shickel et al., 2018).

The EHR initiative in Bangladesh began in 1998 and was launched in 2015 when the Ministry of Health & Family Welfare (MoHFW) undertook the Health & Population Sector Programs (HPSP) to enhance the efficiency of healthcare services. Due to the current government's Digital Bangladesh initiative, EHR is receiving extra attention, and several public and private institutions and NGOs have implemented a range of EHR services (Afrin and Arifuzzaman, 2020).

The aim of this study is to determine the respondent's attitudes and perceptions despite having knowledge affecting the management of EHRs.



METHODOLOGY

Participants



Total sample size, n=144

Staff from Government Employees' Hospital (GEH) and Maternal and Child Health Training Institute (MCHTI).

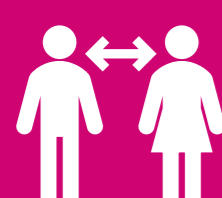
Sampling Method: Convenient Sampling

Inclusion Criteria



- All relevant healthcare providers: Doctors and Nurses
- Administrators
- Staff of Support Services: Clinical Laboratory, Radiology & Imaging, Pharmacy, Technical team
- Receptionist

Task



- Face-to-face interviews among the eligible study population using a semi-structured questionnaire.
- A comparative cross-sectional study to determine the state of management of EHRs.

Measures



- Number of times the relevant healthcare professionals provided with sufficient information on using EHRs & satisfaction level
- Number of times respondents can avail themselves of electricity and internet service and are satisfied with the speed.
- The opinion of the respondents on EHRs.

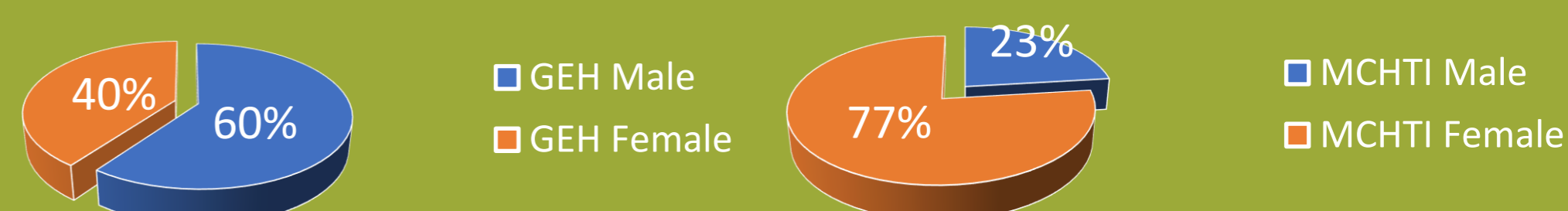
Data Analysis Plan



- Chi-Square Test :**
 - The association between respondents' basic computer skills and their comfortability.
 - The association between respondents' sex and comfortability using computers
- ANOVA test:** To determine the age of the respondents and opinions regarding the performance of their own task on installing EHRs

KEY FINDINGS

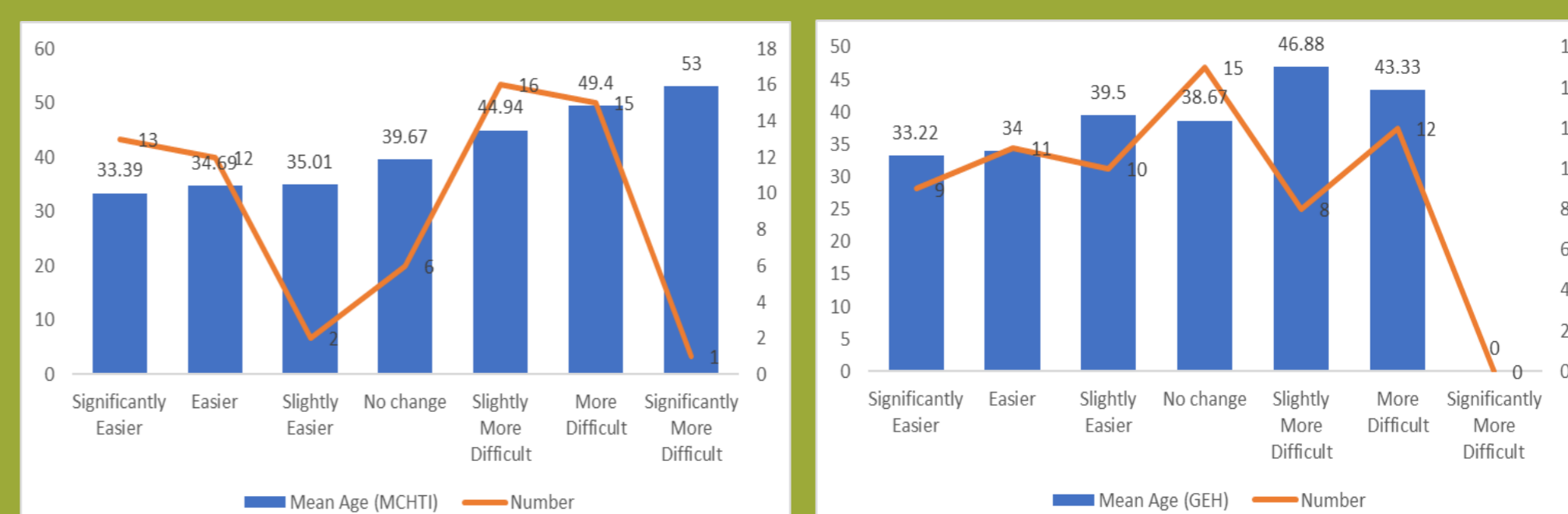
Gender Distribution (%)



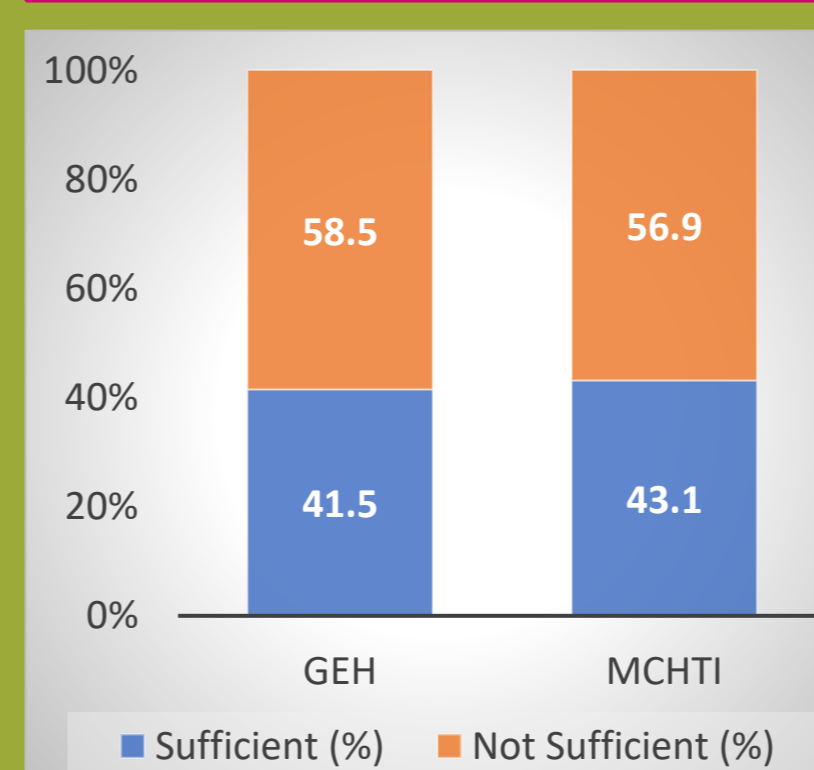
Association between respondents' sex and being comfortable using computers at GEH & MCHTI respectively

GEH				MCHTI			
Sex	Comfortable with Computers			Sex	Comfortable with Computers		
	Yes	No	Total		Yes	No	Total
Male	28	10	38	Male	17	3	20
Female	16	11	27	Female	21	24	45
Total	44	21	65	Total	38	27	65
$\chi^2 = 1.502$ $p = 0.22$				$\chi^2 = 8.39$ $p = 0.004$			

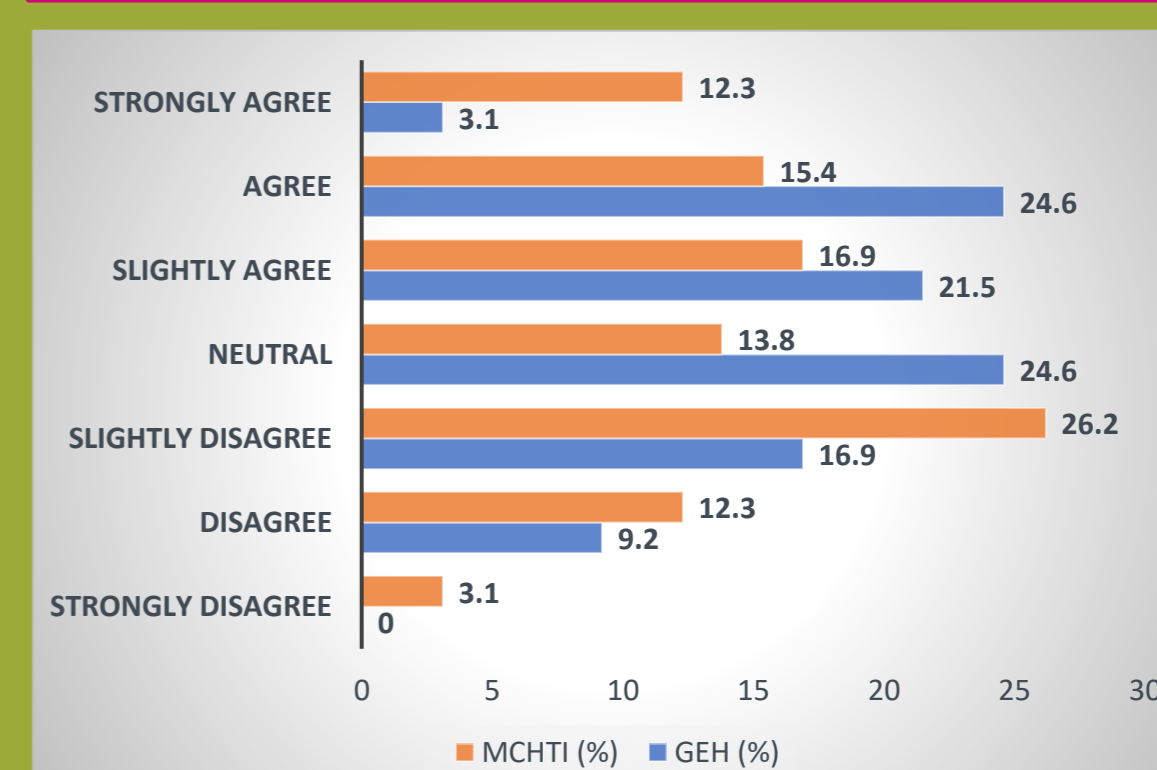
Mean age distribution according to comfortability categories and number



Opinion on resource allocation



Opinion on EHR being worth time and effort



CONCLUSION & RECOMMENDATION

The elderly female service providers of the hospitals were reluctant and uncomfortable in accepting the EHR system. Despite having the knowledge and training, they were less into practicing the EHR system.

Adoption of the EHR systems necessitates the behavioral change of the healthcare staff in addition to technical training.

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