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ORIGINAL ARTICLE

High Value Care Cost conscious: practicing habits and awareness among the doctors during clerkship

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ABSTRASCT

Aim: To evaluate the high value care cost conscious awareness among post administrative staff and doctors clinical.
Study design: Cross sectional Survey.
Place and duration of study: Shahida Islam Medical and Dental College and Hospital. From Jan 2021 to Dec 2021
Methodology: 50 doctors were recruited for conducting the proposed study and asked them to fill the questionnaire i.e., Maastricht HVCC Attitude Questionnaire (MHAQ) which was divided into three subscales such as high-value care, cost incorporation and perceived drawbacks. Moreover, job demands, and resources related questions were asked to resident respondents followed by the assessment of other stakeholders' HVCCC attitudes. Data was analyzed using univariate and multivariate analyses.
Results: Following results have been noted during the research: HVCCC attitudes of faculty and administrators have been more positive than residents ($p \leq 0.05$) whereas patients showed less positive behavior ($p \leq 0.05$) than residents. Moreover, residents' understanding for the HVCCC attitudes of faculty and patients was underestimated ($p < 0.001$) and overestimated ($p < 0.001$) respectively. It was observed that the increasing age was directly proportional to the positive attitudes towards HVCCC in both residents and faculty ($p \leq 0.05$). While in patients' lesser positive attitudes towards HVCCC was significantly associated ($p < 0.001$) with lower perceived health quality. Direct relationship of the autonomy of residents perceived with their attitudes towards the HVCCC was also observed i.e., more independence means more positive attitudes.
Conclusions: Attitudes towards HVCCC of the residents during course of residency vary due to their behavior and learning environment. Residents might misinterpret the faculty's attitudes and patients attitudes as well. Faculty and administrators must be more supportive towards residents to enhance their capabilities through their experiences and knowledge of HVCCC and by giving them freedom in clinical practice.
Keywords: HVCCC, residents, cost conscious care, clinical learning environment

INTRODUCTION

Cancer is one of the deadliest diseases with higher mortality rate and very difficult to treat in terms of treatment strategies and cost after heart diseases in USA[1]. National cancer institute suggested the increase in the annual spending on cancer therapeutics and diagnostics as per its demand[2]. New strategies are being devised in hematology department rising the treatment cost such as novel therapies are invented for treating the lymphoma and leukemia using chimeric antigen receptor T-cells and for hemophilia using gene therapy[3]. Meanwhile, cost-sharing is increased through higher deductibles, co-insurance and co-payment of prescribed drugs as suggested by commercial insurers and government guarantors[4].

As cancer care field progresses rapidly resulting it increase the financial burden on healthcare system and its resources and patients as well. To reduce the distress related with advancement in medical science with increasing treatment cost, some initiatives has been launched by the various organizations to train the medical students and nursing staff for the cost-conscious or high-value care (HVC)[5]. HVC reduces the healthcare waste by providing the best possible care and by balancing the potential pro and cons of new interventions in medical science and their costs[6].

Among these initiatives for teaching the trainees and medical students American Board of Internal Medicine (ABIM) Foundation has launched its campaign called Choosing Wisely and has collected the enormous information on Teaching Value in Health care which is available online[7]. Likewise, Accreditation Council for Graduate Medical Education (ACGME) has organized the course regarding cost-effectiveness for trainees and asked them to find out the solutions and factors for influencing the cost of health care and make sure to practice and support the cost-effective care[8].

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To enforce the value-based and quality healthcare some reforms and rules are being made co-jointly by professional societies of oncology and hematology. These reforms are implemented when all medical educators and instructors educate their medical students and trainees regarding HVC and its importance in healthcare system[9]. Because it has been observed that few (32.9%) internal medicine clerkship directors follow the proper curricula of HVC education and most of them (91.4%) just take it as teaching responsibility. Only 17.8% internal medicine clerkship directors try to assess the competence in students' attitudes towards HVC. As suggested by most of the directors of internal medicine residency program graduate medical education may play its role in reducing the healthcare costs and some directors are just stick to the formal curricula of HVC. To improve the healthcare conditions and environment this gap is needed to be filled as soon as possible so that effective treatment is available in affordable rate for every needed individual[10,11].

Most common hurdle in cutting the unnecessary care are residents' behavior and minimal attending support. As previous survey reported that 54% residents of internal medicine who always role-model cost-conscious care are the one working with faculty. In this survey residents at community programs reported more cost-conscious role-modeling than residents at university-based programs[12-14].

The reason behind this difference might be the practice pattern, institutional rules, culture, financial situation, and patient population which varies between community-based and academic-based programs. Faculty competence and their selection criteria are needed to be addressed by the administrators of academic institutions to enhance the HVC training because many faculty members are not focusing on role-modeling cost conscious care. As reported in Ryskina et al survey which find out the relationship between the HVC education, its initiative and investment and residents' behavior towards HVC training in 214 internal medicine

programs. In this survey program directors of internal medicine are asked to evaluate their institutional support and their curriculum for HVC education[15].

Among all participants of the survey only three-quarters programs has institutional support and only one-third programs has offered development in faculty. Only way to balance the benefits, harms and costs of new medical interventions is the competence of faculty and resident or trainee perception of healthcare stewardship as reported in a previous survey. This study finds out that among many other factors for role-modeling healthcare and residents' perception the important one is faculty development by the institution. Faculty development tools may also be helpful in improving the HVC education as there is lack of resources in oncology and hematology research areas for example McDaniel et al. has introduced an educational equipment called HVC Rounding Tool for discussing the cost and value of pediatrics patient treatment at bedside[16].

Meanwhile, to enhance and improve the HVC education and role-modeling for clinical instructors using case-based learning and healthcare framework many workshops have been arranged by medical institutes yet not much success regarding the improvement of HVC role-modeling in clinical learning environment is achieved.

The objective of the study was to evaluate the high value care cost conscious awareness among post administrative staff and doctors clinical.

METHODOLOGY

After permission from Institutional Ethical Review Board a aurvey of HVCCC attitudes on three subscales was assessed using HVCCC Attitude Questionnaire. Three subscales of HVCCC4 which were used in this study are: high-value care, cost incorporation and perceived drawbacks. All these subscales of HVCCC represents the respondent's perception and beliefs during their clinical trials and checkups such as responsibility of the high-value care provision, integration of costs in daily clinical practices and possible adverse outcomes of HVCCC.

RESULTS

A total of 30 residents and 30 administrators responded to the survey a total of 60 subjects. All the frequency of responses were statistically non-significant at p value <0.05. According to this study Doctors and administrative staff are not very much aware of high value care cost conscious attitude.

Table 1: Overview of Questioner (n=55)

		Residents n=30	Administrative Staff n=30	*p-value
High value care				
If the symptoms are obvious is there need to any test?	Agree	26	19	<0.036
	Disagree	3	21	
	Neutral	1	0	
Do you recommend unnecessary test?	Agree	5	16	<0.240
	Disagree	24	14	
	Neutral	1	0	
Do you allow the excessive test?	Agree	2	22	<0.457
	Disagree	28	6	
	Neutral	0	2	
Cost Incorporation				
Physician should discuss the cost of the treatment	Agree	22	16	<0.329
	Disagree	4	11	
	Neutral	4	3	
Doctor should prefer the cost effective treatment	Agree	29	5	<0.651
	Disagree	1	21	
	Neutral	0	4	
Patients should chose low cost treatment	Agree	16	6	<0.828
	Disagree	11	24	
	Neutral	3	0	
Perceived Drawbacks				
Side effects of the treatment should be encountered	Agree	44	15	<0.154
	Disagree	0	15	
	Neutral	7	0	
Frequent follow-ups are required	Agree	12	22	<0.853
	Disagree	18	8	
	Neutral	0	0	
Short term relief	Agree	11	22	<0.268
	Disagree	19	7	
	Neutral	0	1	

*Chi-square test was applied

DISCUSSION

Attitudes towards HVCCC of significant members of clinical learning environment such as faculty, residents, administrators, and patients have been examined during this survey. Residents are the one to who expected to learn and provide the best possible HVCCC to patients. Comparison of the attitudes towards HVCCC in all mentioned participants shows that the attitudes vary among these individuals depending on the knowledge of HVCCC and clinical experience. Results reveal that faculty and administrator exhibit most positive attitudes towards HVCCC whereas patients exhibit most negative attitudes[17].

Healthcare resources are being monitored by the faculty and administrators of the hospitals and clinical learning institutes who are responsible for providing the healthy and comfortable environment for both residents and patients. It is the big challenged for the authorities of the health care system to meet the requirements of the clinical demands with the limited available resources. Patients mainly focus on improving their health no matter what and have little or no knowledge at all regarding HVCCC and its benefits[18-21].

Furthermore, residents have different attitudes because they tend to focus on learning and experience new things. Residents' attitudes towards HVCCC are less positive than faculty and administrators while their attitudes are more positive than patients because of their learning progression and development[3]. Clinical training is the transition phase as a resident from a lay man to a

medical professional, this phase influences the attitudes of the residents based on their observations of medical sponsors' behavior, reports of colleagues and surroundings[22]. It is found that positive attitude towards HVCCC of faculty was underestimated and patients' attitudes were overestimated by the residents. Residents misjudge faculty attitude because of their non-convincing behavior and thoughts on HVCCC which undermines their positive attitudes. Patients' attitudes towards HVCCC have been misunderstood by the residents because they may be ignorant of patients' worries and think that patients know the benefits of HVCCC better than them. Unawareness of residents regarding the patient's knowledge on HVCCC and concerns on their healthcare decision may results in failure of addressing the important issues and complications of patient's health[4]. Physicians do not find much HVCCC downsides and has less responsibility of patients because of their supportive working department[23]. For cost incorporation elderly faculty and residents are preferable because of their strong decision-making habit and vast clinical experience[8].

Workplace, culture, and regional practice patterns also influence the various attitudes exhibit by the faculty members working in different regions and counties but for residents does not influence by these factors as they have minimum exposure in learning environment. Patients prioritize their own health and thinks HVCCC may deteriorate their health instead of improving so they are not inclined towards HVCCC[4].

Working environment and freedom of work vastly effect the attitudes of residents towards HVCCC i.e., autonomy is directly related to positive attitude of residents towards HVCCC. Independence of residents in decision making for patients' treatment by trusting their observations and diagnosis makes them more confident and show more positive attitude towards HVCCC. Work pressure is also associated with the attitudes of clinical staff (i.e., residents and faculty) towards high-value care and cost incorporation. Higher work pressure may hinder the extracurricular activities and healthcare members feel exhausted due to overburdening of tasks but in exchange they get extensive experience through it[24-26].

This research finds out the relationship of HVCCC attitudes of residents, faculty, administrators, and patients in a clinical learning environment which indicates that work pressure is related to the involvement of frontrunner in HVCCC. Attitudes of stakeholders of health care department towards HVCCC may differ in different regions and countries as per their culture and clinical practice. Moreover, faculty and residents mainly focus on patients care while administration focuses on managing finances, resources, and facilities available in the department and patients prioritize their own health[27].

CONCLUSION

During clinical learning environment HVCCC attitudes among faculty, administrators, residents, and patients vary depending on their knowledge of HVCCC and authority of decision making. Faculty and administrators might provide the encouraging and supportive environment for the residents to learn and educate them with their wide-ranging experience to comprehend the patient-centered strategies for HVCCC attitudes.

Conflict of interest: Nil

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