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ORIGINAL ARTICLE

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Patient perceptions of healthcare service quality in Romania: Public versus private hospitals – Implications for developed and developing healthcare systems

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ABSTRACT

Objective: Recent increases in per capita income and longevity in Central and Eastern European counties (CEECs), alongside a slow-changing soviet-era public healthcare system, has led to the emergence of private hospitals. This paper investigates the differential patient service quality perceptions for private versus public hospitals, as well as for three types of healthcare services: primary, ambulatory, and inpatient care.

Methods: Data from 1,673 patients of private and public hospitals in the capital of Romania were collected in face-to-face interviews. Analysis of covariance and partial-least-squares techniques were used to examine the relationships between perceived service quality, hospital ownership status and the type of health service patients received.

Results: Over 70% of women prefer private health facilities to public hospitals (compared to less than 30% of men). While private hospitals rank higher than public hospitals on most attributes, the interaction effect of gender and hospital type reveals that assurance and empathy are the only significant attributes in driving women to private hospitals. (Physical facilities and staff appearance) as well as intangible dimensions of service quality (assurance, responsiveness, reliability, and empathy) have a positive impact on perceived overall service quality of healthcare. Improvements in perceptions of hospital's tangibles, staff's responsiveness and empathy have the greatest potential to enhance perceived overall service quality.

Conclusions: This paper demonstrates the importance of breaking down health services into various sub-categories both in terms of perceived healthcare attributes and in terms of tangible healthcare facilities, such as public and private hospitals.

Key Words: Private hospitals, Public hospitals, Service quality, Healthcare service type, Romanian healthcare

1. INTRODUCTION

Significant recent increases in per capita income and longevity in Central and Eastern European counties (CEECs), alongside a slow-changing soviet-era public healthcare system, has led to the emergence of private healthcare offerings, particularly polyclinics, hospitals, general practitioner facili-

ties, and dental practices. The paper responds to calls made to adapt service quality models to the healthcare context and use data from both public and private settings outside the United States.[1, 2] Indeed, the healthcare management literature points to the lack of (and compelling need for) research on perceived service quality and performance in developing and emerging economies and the need for developing well-validated measurement models for evaluating service quality, and most models of healthcare service quality are of Western origin.[3] Data on patient satisfaction in CEECs are sparse and often unexploited.[4, 5] A need to contextualise dimensions and items related to facets of health services was outlined in the literature.[6] Furthermore, patient perceptions of service quality in emerging countries frequently rely on data from public hospitals.[7, 8] This paper addresses these gaps by developing a robust, contextualised and validated measurement model for assessing data from both public and private health facilities in Romania (the second largest new member state among CEECs).

Furthermore, unlike prior studies that have assessed the impact of individual service quality attributes on patients' perceptions of overall healthcare services,[9, 10] this paper addresses the distinct paucity of research on patient service attribute perceptions associated with different types of healthcare services offered, e.g., primary care, ambulatory care, and inpatient care. Few studies examined healthcare service quality according to the type of service accessed by patients.[11] For instance, a patient faced with life-saving surgeries performed as inpatient procedures would doubtless prioritize different attributes (e.g., the quality of hospital facilities, and surgeon competence) to another visiting a hospital for, noncritical treatment (in which case, perhaps responsiveness of the staff would be most valued). The study measured functional service quality, which has been shown to be the most important factor in determining patient perceptions of health delivery services[12, 13] and demonstrates that patients prioritize different service attributes when evaluating diverse healthcare services such as primary care (routine prevention, wellness and treatment for common illnesses), ambulatory (or same day outpatient care), and inpatient procedures (surgeries or births). In addition, consistent with past research that asserts that women and men evaluate healthcare services differently from each other,[14] this study reveals that women hold assurance and empathy to be more important ideals of healthcare delivery than men. Furthermore, despite private clinics ranking higher on multiple attributes than public hospitals, the results also demonstrate that assurance and empathy drive women to private clinics. Implications of this study are relevant and far-reaching, generally applicable in large metropolitan areas in rapidly developing and developed economies.

A modified SERVQUAL instrument designed originally by Parasuraman et al.[15, 16] was used to measure service attributes in the healthcare context similar to previous studies.[10, 17–21] This scale captures patient perceptions of a service along five dimensions, including tangibles which measure physical facilities whether the employees are neat in appearance, medical equipment is considered modern and if there are sufficient medical consumables such as gloves and needles; responsiveness (measures the provider's desire to assist customers and provide timely service); assurance (measures knowledge the provider and his/her ability to convey trust and confidence); and empathy (measures caring and personal attention).[16]

Data for this research involved in-depth exploratory interviews and face-to-face interviews with 1,673 respondents in three private and public hospitals in Bucharest, the capital city of Romania with a population of over 1.75 million people. The purpose of this paper is to provide healthcare administrators, health care providers and policy makers with practical patient level insights of service quality that can drive overall improvement in the delivery of healthcare services.

2. METHODS

2.1 Sample and design

The study is based on a multimethod approach of qualitative and quantitative research stages. The first qualitative research stage consisted of 30 exploratory in-depth interviews with patients from public and private hospitals in Bucharest for construct elicitation purposes. Patients for the first research stage were recruited in order to capture a wide range of age groups (32 to 78 years; average age = 52), with different levels of exposure to service quality and represented both public (N = 15) and private hospitals (N = 15). The results derived from the first research stage were used to adjust measurement items to the specific research scenario in Romania.

In the second research stage, data were collected in face-to-face interviews with patients of three major hospitals in Bucharest: 675 patients of a private hospital as well as 998 patients in two public hospitals. The capital of Romania, Bucharest, was chosen for the fieldwork because several competing hospitals provide patients with choice and render validity to the concept of customer loyalty. Interviews took place at service sites among three subgroups of patients in the following settings: Primary care -services that cover a wide range of prevention, wellness and treatment for common illnesses, Ambulatory Care – healthcare that can be obtained without being admitted into the hospital as an inpatient i.e. same day outpatient services, and inpatient care-

services such as surgeries, births that in most cases require an overnight stay.

The original questionnaire was written in English, translated into Romanian and back-translated into English to increase instrumentation equivalence.[7]

The survey used stratified random sampling. In a first stage strata, patients from major specialties provided by each hospital were selected from the hospital database. Respondents in each stratum were then selected based on a systematic random sampling. Piloting of the questionnaire, patient briefing, and careful research design enhanced the response rate to over 80%. Trained interviewers with knowledge of the local healthcare sector were employed. They obtained informed consent from each participant and no identifiable information was collected to protect privacy.

The age range for the sample was between 18 and 92 years. Patients in the final sample are largely female (63.5%) with the average age of 46. A total of 1,673 usable questionnaires are used for data analysis.

2.2 Measures

The service quality measures were based on the five dimensions of the SERVQUAL scale that was adapted to hospitals.[15, 16] The adapted SERVQUAL scale contains five scales with three measures each. In qualitative interviews and a pilot test, the scales were reviewed and edited to adjust to the research environment. The pilot test pointed out that the five-point Likert was the most suitable format for service evaluation/comprehension. All items use a five-point Likert-scale with strongly disagree, disagree, neither disagree nor agree, agree and strongly agree (see online appendix for the SERVQUAL scales). Measures of perceived level of service performance were appropriate to measure service quality[8] and had a high predictive validity for satisfaction.[17] These 15 items are clustered into five dimensions: assurance, responsiveness, reliability, empathy, and tangible service quality.

Overall service quality is measured with a five-point single-item measure: "How would you rate the overall level of service you received as a patient in the hospital?" and anchored by 1 = very poor and 5 = Very good. The use of a single-item measure for overall service quality is in line with other studies,[22, 23] as global evaluations exhibit equally strong content validity. Demographic information, including age, gender, education, and monthly household income, was also collected.

2.3 Analysis

Differences in demographic characteristics between respondents of private and public hospitals were assessed using Pearson chi-square tests. An analysis of covariance (ANCOVA) compared the differences in perceived service quality in private and public hospitals, as well as for the analysis of interactions between gender and hospital type. Lastly, the impact of the five service quality dimensions on patients' perception of overall health services quality were investigated.

The model controlled for the private versus public hospital fixed effect and demographics as described above. For this analysis, variance-based partial least squares structural equation modelling (PLS-SEM) was employed, using the statistical tool SmartPLS 4.[24] A threshold of *P*-values less than .05 was considered to assess statistical significance.

3. RESULTS

Survey questionnaires were completed by 1,673 patients, comprising 998 (59.7%) respondents from public hospitals. Just over half of the respondents (58.8%) were female and the most common monthly household income was below 1,500 Euros (83.4%). Among the respondents, 36.1% were primary care visits, 33.6% were scheduled for ambulatory care, and the remaining 30.03% comprised hospital inpatients. Private hospital patients comprise an even higher percentage of female patients at 70.4%, with the majority of then (68.7%) having household incomes of more than 1,500 Euro per month. Compared with private hospitals, patients from public hospitals had a lower education profile and tended to be older (see Table 1).

3.1 Impact of hospital type (public versus private) on service quality perceptions

ANCOVA results confirm that private hospital patients perceived significantly higher overall health service quality, as well as higher service quality in the five dimensions of the SERQUAL scale. These results are similar to those found in the emerging economy of Turkey.[25] Private hospital patients reported significantly higher satisfaction scores for all service quality dimensions. For both public and private hospitals, patients perceived the lowest service quality for the "responsiveness" dimension. Public hospital patients perceived the "assurance" dimension highest compared to "tangible quality," which rated highest for private hospital patients. While the Levene test indicated a violation of the homoscedasticity assumption, the large sample size mitigated concerns over homoscedasticity for within the data (see Table 2).

Table 1. Demographic analysis

		Total		Public Hospital		Private Hospital		Pearson χ^2	
		n	%	*n*	%	*n*	%	Value	*p*
Gender	Male	611	36.5%	411	41.2%	200	29.6%	23.384	.000
	Female	1063	63.5%	587	58.8%	476	70.4%		
Age Group	≤ 25	153	9.2%	81	8.1%	72	10.7%	188.424	.000
	26-30	297	17.8%	137	13.7%	160	23.8%		
	31-40	440	26.3%	188	18.9%	252	37.4%		
	41-50	214	12.8%	135	13.5%	79	11.7%		
	51-60	244	14.6%	183	18.4%	61	9.1%		
	61-70	173	10.4%	142	14.2%	31	4.6%		
	> 70	149	8.9%	131	13.1%	18	2.7%		
Education	Primary School/10th Grade	175	10.8%	160	16.9%	15	2.2%	255.066	.000
	Professional/Technical School	163	10.1%	137	14.5%	26	3.9%		
	High School	336	20.8%	230	24.3%	106	15.9%		
	College	128	7.9%	92	9.7%	36	5.4%		
	University	812	50.3%	328	34.6%	484	72.6%		
Income	<600 Euro	194	12.1%	178	18.4%	16	2.5%	544.925	.000
	600-800 Euro	357	22.2%	302	31.2%	55	8.6%		
	800-1,000 Euro	270	16.8%	205	21.2%	65	10.2%		
	1,000-1,500 Euro	189	11.8%	126	13.0%	63	9.9%		
	1,500-2,000 Euro	150	9.3%	80	8.3%	70	11.0%		
	2,000-3,000 Euro	263	16.4%	38	3.9%	225	35.4%		
	over 3,000 Euro	182	11.3%	40	4.1%	142	22.3%		
Service Type	Medical Check	601	36.10%	254	25.60%	347	51.50%	134.687	.000
	Treatments	560	33.60%	422	42.50%	138	20.50%		
	Inpatient procedures	506	30.40%	317	31.90%	189	28.00%		

Table 2. Analysis of covariance for service quality dimensions

Quality Dimensions	Complete Data		Public Hospital		Private Hospital		F	p
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev		
Assurance	4.63	0.591	4.58	0.651	4.71	0.482	74.353	.0000
Responsiveness	4.35	0.794	4.21	0.870	4.54	0.619	154.679	.0000
Reliability	4.44	0.725	4.32	0.785	4.62	0.585	146.734	.0000
Empathy	4.58	0.691	4.44	0.794	4.77	0.442	162.189	.0000
Tangible	4.44	0.754	4.13	0.820	4.88	0.295	599.706	.0000
Overall Service Level	4.26	0.812	4.02	0.824	4.61	0.649	274.455	.0000

Note. Model controls for age, gender, education, monthly household income

3.2 Impact of healthcare service type on service quality perceptions

The regression model confirmed that types of healthcare service provided had a differential impact on the relationship between SERVQUAL dimensions and overall perceived health service quality. While it would be expected that all five dimensions positively and significantly impact overall healthcare service perceptions as it is confirmed for the overall data, notable exceptions in the three service categories were also detected. For inpatient services and procedures (like surgeries or births), assurance ($\beta = 0.112$, $p < .05$), responsiveness ($\beta = 0.142$, $p = .12$) and empathy ($\beta = 0.224$,

$p < .001$) were significant. On the other hand, for ambulatory care only the "responsiveness" ($\beta = 0.126$, $p = .022$) and "tangible" quality ($\beta = 0.370$, $p < .001$) dimensions had a significant relationship with overall quality perceptions. "Responsiveness" ($\beta = 0.145$, $p = .018$) and "tangible quality"

($\beta = 0.205$, $p < .001$) also significantly impacted overall service quality for ambulatory care. Interestingly, only for ambulatory care was the "reliability" dimension significantly ($\beta = 0.140$, $p = .01$) related to overall service quality perceptions (see Table 3).

Table 3. Partial least squares regression on overall service level

	Complete			Primary Care			Ambulatory Care			Inpatient Care		
	beta	*T*	*p*	beta	*T*	*p*	beta	*T*	*p*	beta	*T*	*p*
1 Assurance→ Overall SQ	0.098	2.486	.013	0.095	1.227	.220	0.104	1.520	.129	0.112	1.974	.048
2 Responsiveness→ Overall SQ	0.150	4.625	.000	0.145	2.372	.018	0.126	2.286	.022	0.142	2.510	.012
3 Reliability→ Overall SQ	0.065	1.974	.048	0.140	2.570	.010	0.005	0.078	.938	0.099	1.660	.097
4 Empathy→ Overall SQ	0.127	3.033	.002	0.112	1.414	.157	0.139	1.790	.073	0.137	2.207	.027
5 Tangible→Overall SQ	0.275	9.052	.000	0.205	3.713	.000	0.371	7.366	.000	0.224	3.788	.000

Note. Model controls for age, gender, education, monthly household income, and hospital type

Given the notably higher relative number of female respondents for the private hospital scenario, the interaction effect between private hospital and gender was analyzed. The "assurance" and "empathy" dimensions display a significant

interaction effect, pointing to female patients seeking private hospital care for higher assurance ($F = 6.95$, $p = .008$) and empathy ($F = 4.65$, $p = .031$) in their treatment (see Table 4 and Figure 1).

Table 4. Interaction effects for clinic type by gender

Descriptives		Assurance		Responsiveness		Reliability		Empathy		Tangible	
Clinic	Gender	Mean	STD	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Public	Male	4.64	0.57	4.26	0.84	4.38	0.72	4.53	0.70	4.17	0.81
Hospital	Female	4.53	0.70	4.18	0.90	4.28	0.83	4.38	0.86	4.10	0.83
	Total	4.58	0.65	4.21	0.87	4.32	0.79	4.44	0.80	4.13	0.82
Private	Male	4.66	0.52	4.50	0.63	4.63	0.53	4.75	0.43	4.85	0.32
Hospital	Female	4.73	0.47	4.56	0.62	4.62	0.61	4.77	0.45	4.89	0.29
	Total	4.71	0.48	4.54	0.62	4.62	0.59	4.77	0.44	4.88	0.30
Total	Male	4.65	0.55	4.33	0.78	4.47	0.67	4.60	0.63	4.39	0.76
	Female	4.62	0.61	4.35	0.80	4.43	0.76	4.56	0.73	4.46	0.75
	Total	4.63	0.59	4.34	0.80	4.44	0.73	4.57	0.69	4.44	0.76

Effects	Assurance		Responsiveness		Reliability		Empathy		Tangible	
	F	*p*	*F*	*p*	*F*	*p*	*F*	*p*	*F*	*p*
Clinic	56.66	.000	119.48	.000	120.53	.000	127.97	.000	493.98	.000
Gender	0.00	.959	1.34	.248	0.34	.561	0.76	.382	1.01	.316
Clinic by Gender	6.95	.008	2.18	.140	0.91	.340	4.65	.031	1.18	.278

4. DISCUSSION

### 4.1 Statement of principal findings

This study evaluated the difference in perceived health service quality between public and private hospitals, as well as the differential impact of service quality dimensions on perceived health service quality for different service contexts. The results demonstrate that patients in private hospitals perceived higher service quality overall as well as in all the five

SERVQUAL dimensions. The study also identified that only responsiveness e.g. (convenient scheduling, how quickly patients are seen and prompt medical testing) and tangible service quality e.g. (professionalism of staff, quality of physical facilities) have a significant impact on overall perceived service level for all service contexts. Assurance and empathy have a significant impact on overall perceived service quality for inpatient services like inpatient procedures while

reliability impacts overall service quality only for the context of primary care. Hospital administrators, therefore, need to manage patient expectations of specific dimensions of service quality by taking into account the type of service accessed.
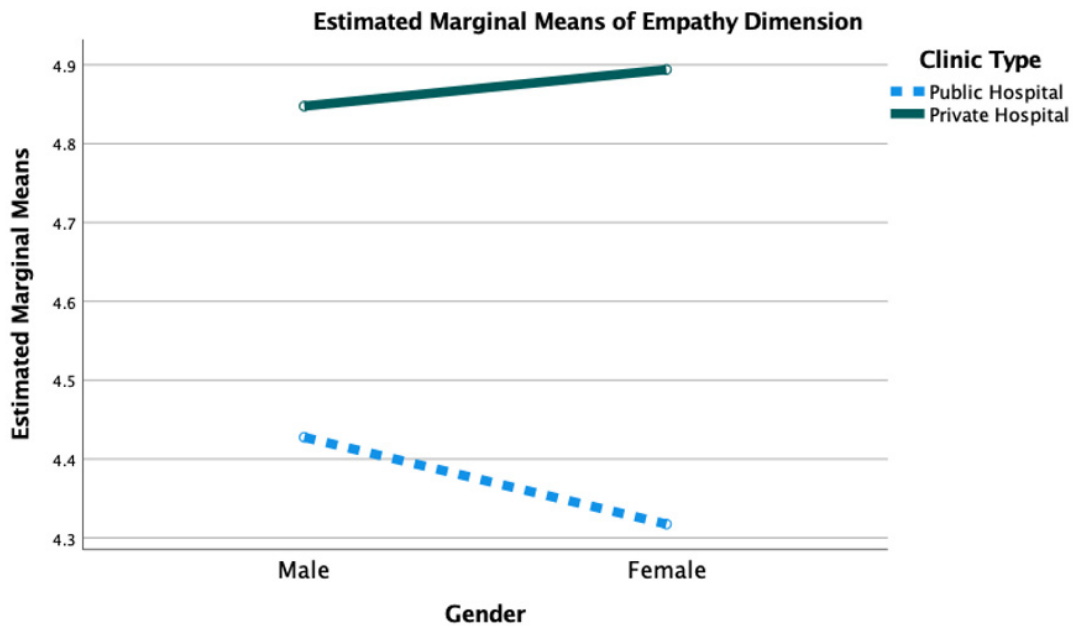
Panel A
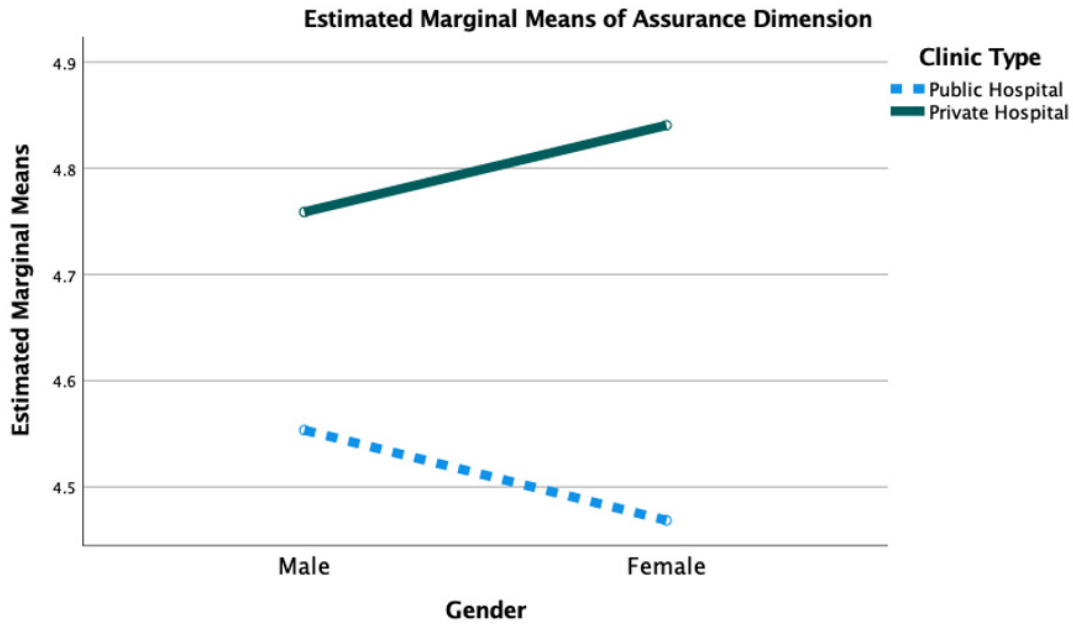
Panel B

Figure 1. Clinic type by gender interaction

4.2 Strengths and limitations

This study is the first to evaluate healthcare quality of both private and public hospitals in Romania using a validated measurement instrument and a large sample. It is also unique in measuring perceived service quality across healthcare service delivery lines, demonstrating that patients routinely prioritize different service quality attributes to different types of healthcare services, unlike the one size fits all approach adopted by prior studies.

4.2.1 *Interpretation within the context of the wider literature*

Private vs. public differentiation

Table 2 suggests that higher-cost private hospitals generally ranked higher on all the measured attributes than public hospitals. However, particularly noteworthy was the gender difference regarding the choice of public and private hospitals. Table 1 identifies a significant number of women (70.6%) attended private hospitals, compared to only 29.4% of men. So, were there specific attributes that female patients were more sensitive to, that drove them to patronize private hospitals despite the added expense? To understand the reasons why, interaction effects (see Table 4, clinic by gender) were conducted. The results indicate that while both genders rated private hospitals generally higher than public hospitals on all the measured attributes, only assurance and empathy were instrumental in driving women's desire to choose private hospitals. Women were particularly sensitive to kind and gracious treatment and the assurance that the medical team that was treating them were professional and of excellent quality. Since empathy was only significant for inpatient procedures, it stands to reason that women prefer private hospitals for these procedures largely due to the increased level of kindness and empathy provided. It is particularly important to note that reliability, responsiveness and tangibiles, while independently significant, were not factors that drove female patients to private hospitals.

Differential impact of SERVQUAL dimensions on service contexts

Patients prioritized different attributes as being important determinants of overall service quality in different service contexts. Indeed, "tangibles" was the only attribute universally significant across all three healthcare service lines: primary care, ambulatory care, and inpatient care. It was also the most important attribute in all three contexts as determined by the beta value (see Table 3). In other words, patients unequivocally perceived the quality of "tangibles" physical facilities, equipment and appearance of the service staff to be the most important variable in determining overall service quality irrespective of treatment type. In other words,

appearances do matter. This is in line with findings from hospitals in China[26] and Greece.[27]

Outside of the "tangibles," patients prioritized different service attributes when evaluating overall service quality in different contexts. For primary care, patients considered responsiveness and reliability to be important while, remarkably, assurance and empathy were insignificant. Since primary care is generally considered routine care, patients prefer service providers that are reliable ("do what you say when you say you will do it") and responsive ("please answer my questions and provide lab results on a timely basis"). However, for ambulatory care the only attribute outside of "tangibles" that impacted overall service quality was responsiveness. This is a noteworthy finding because it suggests that for routine treatments, patients feel that anyone reasonably competent could provide the service, and do not seek out the assurance of a highly skilled treatment team. Finally, for inpatient procedures, all attributes, except reliability, were significant. Respondents, understandably, wanted the assurance that the surgical team treating them was of quality and that they were empathetic during what may have been a traumatic procedure.

4.2.2 *Implications for policy, practice, and research*

Firstly, healthcare administrators, providers and policy makers should work on improving tangibles; i.e., the perceived quality of the facilities and professional appearance of the staff.[28] This maybe one of the easiest quality dimensions to address and evaluate. Providing a physical environment that is modern, comfortable, and clean can greatly reduce anxiety lessening the chances that a patient feels dissatisfied with their healthcare service.

Secondly, administrators should design healthcare services using a patient-centered model that prioritizes an individual's specific health needs and desired health outcomes which become the catalyst for all decision making and quality measurements, for instance, staff should greatly prioritize responsiveness and reliability.[29] Indeed, reliability was only significant for primary care and not for the other two treatments measured, necessitating specialized training – in terms of predictable, dependable service and timely responses. Timely responses are also particularly important to ambulatory care, more so than any of the other three attributes. Staff should hence be trained to focus on this attribute when providing routine treatments to patients. When it comes to inpatient procedures all attributes except reliability led to perceptions of overall service quality. In addition to high quality tangibles, only the most experienced staff members, who can provide high levels of assurance, responsiveness, and (most importantly) empathy (in addition to high quality tangibles)

should be dedicated to inpatient care. The findings also suggest that since only assurance and empathy were significant in driving female patients to private hospitals, financially constrained public hospitals can garner an increase in female clients by prioritizing empathy training for their employees and ensure their most competent providers are dedicated to inpatient procedures.

5. CONCLUSIONS

The findings of this paper have managerial and leadership implications which calls for a focus on organizational level training in emotional intelligence, and soft skills such as empathy, compassion, and communication. Training in "soft skills" development should be implemented across healthcare service lines, such as primary, ambulatory and in patient care.[30] The Romanian healthcare context echoes the healthcare realities of other markets across Eastern Europe. Further, with healthcare infrastructure rapidly growing in developing countries across Asia and Africa, these research results may be valid across many global private or public healthcare settings. Future research directions should expand on the SERVQUAL instrument to include an assessment of additional quality perception indicators that include for example the implementation of new technologies such as telemedicine, remote patient monitoring and artificial intelligence.

REFERENCES

[1] Berry L, Bendapudi N. Health Care: A Fertile Field for Service Research. J of Service Res 2007; 10(2): 111. https://doi.org/10.1177/1094670507306682

[2] Carrillat FA, Jaramillo F, Mulki JP. The Validity of the SERVQUAL and SERVPERF scales, a meta-analytic view of 17 years of research across five continents. Int J of Service Ind Manage. 2007; 18(5): 472. https://doi.org/10.1108/09564230710826250

[3] Endeshaw B. Healthcare service quality-measurement models: a review. Journal of Health Res. 2

[4] Charalambous A, Efstathiou G, Adamakidou T, et al. Adult cancer patients satisfaction of nursing care: a cross-national evaluation of two Southeastern European countries. The International Journal of Health Planning and Management. 2014; 29(4): e329-46. PMid: 24254548. https://doi.org/10.1002/hpm.2225

[5] Stepurko T, Pavlova M, Groot W. Overall satisfaction of health care users with the quality of and access to health care services: a cross-sectional study in six Central and Eastern European countries. BMC Health Services Research. 2016; 16(1): 1-3. PMid: 27485751. https://doi.org/10.1186/s12913-016-1585-1

[6] Ali J, Jusoh A, Idris N, et al. Applicability of healthcare service quality models and dimensions: future research directions. Total Quality Management & Business Excellence. 2023; 35(6): 1378-93. https://doi.org/10.1108/TQM-12-2021-0358

[7] Akdere M, Top M, Tekingündüz S. Examining patient perceptions of service quality in Turkish hospitals: The SERVPERF model. Total Quality Management & Business Excellence. 2020; 31(4): 342-52. https://doi.org/10.1080/14783363.2018.1427501

[8] Duc Thanh N, Quynh Anh P, Thi Huyen Chang P, et al. Cross-Cultural Adaption and Validation of SERVPERF Tool for Measuring Healthcare Quality in an Oncology Public Hospital, Vietnam. INQUIRY: The Journal of Health Care Organization, Provision, and Financing. 2023; 60: 1-6. PMid: 36680357. https://doi.org/10.1177/00469580221146826

[9] Lacerda AB, Souza AS, Da Silva GK, et al. Basic Health Units services quality assessment through Kano and SERVQUAL models. Benchmarking: An International Journal. 2022; 29(9): 2858-80. https://doi.org/10.1108/BIJ-06-2021-0351

[10] Shi H, Fan M, Zhang H, et al. Perceived health-care quality in China: a comparison of second- and third-tier hospitals. Int J of Qual in Health Care. 2021; 33(1): 1. PMid: 33693896. https://doi.org/10.1093/intqhc/mzab027

[11] Lee D, Kim KK. Assessing healthcare service quality: a comparative study of patient treatment types. International Journal of Quality Innovation. 2017; 3(1): 1-5. https://doi.org/10.1186/s40887-016-0010-5

[12] Fiala TG. What do patients want? Technical quality versus functional quality: a literature review for plastic surgeons. Aesthet Surg J. 2012; 32: 751-9. PMid: 22859547. https://doi.org/10.1177/1090820X12452555

[13] Mosadeghrad AM. Healthcare service quality: towards a broad definition. Int J Health Care Qual Assur. 2013; 26: 203-19. PMid: 23729125. https://doi.org/10.1108/09526861311311409

[14] Bem SL. Gender schema theory: a cognitive account of sex typing. Psychol Rev. 1981; 88: 354. https://doi.org/10.1037/0033-295X.88.4.354

[15] Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. J Mark. 1985; 49: 41-50. https://doi.org/10.1177/002224298504900403

[16] Parasuraman A, Berry LL, Zeithaml VA. Refinement and reassessment of the SERVQUAL scale. Journal of Retailing. 1991; 67(4): 420.

[17] Babakus E, Mangold WG. Adapting the SERVQUAL scale to hospital services: an empirical investigation. Health Serv Res. 1992; 26: 767.

[18] Hoxha MA. Community and health-care service quality in Kosovo: a confirmatory analytical approach. Journal of Enterprising Communities: People and Places in the Global Economy. 2023; 17(2): 535-561. https://doi.org/10.1108/JEC-11-2021-0151

[19] Li M, Lowrie DB, Huang CY, et al. Evaluating patients' perception of service quality at hospitals in nine Chinese cities by use of the ServQual scale. Asian Pac J Trop Biomed. 2015; 5: 497-504. https://doi.org/10.1016/j.apjtb.2015.02.003

[20] Teshnizi SH, Aghamolaei T, Kahnouji K, et al. Assessing quality of health services with the SERVQUAL model in Iran. A systematic review and meta-analysis. International Journal for Quality in Health Care. 2018; 30: 82-89. PMid: 29408970. https://doi.org/10.1093/intqhc/mzx200

[21] Van Herk H. Poortinga YH, Verhallen TMM. Equivalence of survey data: Relevance for international marketing. European J of Mark. 2005; 39(3/4): 351. https://doi.org/10.1108/03090560510581818

[22] Brady MK, Cronin Jr JJ, Brand RR. Performance-only measurement of service quality: a replication and extension. Journal of Business Research. 2002; 55(1): 17-31. https://doi.org/10.1016/S0148-2963(00)00171-5

[23] Cronin J, Taylor S. Measuring service quality: A Re-examination and Extension. Journal of Marketing. 1992; 56(3): 55. https://doi.org/10.1177/002224299205600304

[24] Ringle CM, Wende S, Becker JM. SmartPLS 4. Oststeinbek: SmartPLS GmbH. 2022. Available from: http://www.smartpls.com

[25] Yarimoglu E, Gorkem A. How service quality in hospitals varies based on hospital ownership and demographics: a study on Turkish patients living urban areas. Total Quality Management & Business Excellence. 2022; 33: 7-8, 777-793. https://doi.org/10.1080/14783363.2021.1890576

[26] Fan LH, Gao L, Liu X, et al. Patients' perceptions of service quality in China: An investigation using the SERVQUAL model. PloS One. 2017; 12(12): e0190123. PMid: 29272312. https://doi.org/10.1371/journal.pone.0190123

[27] Goula A, Stamouli MA, Alexandridou M, et al. Public hospital quality assessment. Evidence from Greek health setting using SERVQUAL model. International Journal of Environmental Research and Public Health. 2021; 18(7): 3418. PMid: 33806126. https://doi.org/10.3390/ijerph18073418

[28] Al-Hilou M, Suifan T. The mediating effect of patient trust on the relationship between service quality and patient satisfaction. International Journal of Health Care Quality Assurance. 2023; 36(1/2): 1-16. PMid: 37938922. https://doi.org/10.1108/IJHCQA-05-2023-0028

[29] Edgman-Levitan S, Schoenbaum SC. Patient-centered care: achieving higher quality by designing care through the patient's eyes. Israel Journal of Health Policy Research. 2021; 10: 1-5. PMid: 33673875. https://doi.org/10.1186/s13584-021-00459-9

[30] Thajil KM, AL-Abrrow H. The effect of the bright triad on positive innovation in healthcare sector: The mediating role of emotional intelligence. International Journal of Healthcare Management. 2023; 1-12. https://doi.org/10.1080/20479700.2023.2177608