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Exploring the impact of patient engagement strategies on overall patient experience in public hospitals

Fatima Al-Kaabi *

Faculty Of Medicine Health and Life Science, Swansea University, United Kindom (UK)

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Abstract

This research explores the impact of patient engagement strategies on overall patient experience in public hospitals, where limited resources characterise the setting. The study examines several key aspects of engagement, including communication, involvement in decision-making, and the perceived quality of care, through a cross-sectional survey of patients. It is found that interpersonal elements of care, especially respectful communication and emotional support, matter more in creating favourable patient experiences than official involvement processes or architectural characteristics of services. The patients reported high satisfaction on average, but the study revealed a significant mismatch between the standardised measures of engagement and patients' priorities, indicating that traditional instruments may fail to detect meaningful occasions of care in resource-limited settings. These findings challenge conventional beliefs about the efficiency of the uniform approach to engagement used in most healthcare systems. Instead, they emphasise the need for humanistic strategies that focus on the human relationships between providers and patients. These findings can inform current debates on patient-centred care and demonstrate how aspects of relationships can mitigate systemic restrictions in governmental hospitals. The research supports the idea that engagement frameworks should be more flexible and tailored to the local context and needs of patients, rather than focusing on standardised interventions. The possibility of aligning institutional engagement strategies more closely with patient expectations in various healthcare settings should be the focus of future research.

Keywords*:* Healthcare; Patient Engagement; Patient Satisfaction; Public Hospitals

1. Introduction

In today's healthcare systems, patient engagement is vital, as it affects patient satisfaction, the outcomes they receive, and the overall quality of treatment[1]. Engaging patients well in public hospitals can overcome problems of insufficient supplies and high workloads by encouraging communication, trust, and teamwork [2]. Patient engagement means more than just having patients join in; it requires them to be part of the care decisions, understand their health matters, and make sure the treatment is centred on them[3-5]. Since value-based care is being adopted globally, it is now essential for policymakers, hospital administrators, and healthcare staff to know how patient engagement strategies affect patients [6].

Public hospitals, which treat a wide range of patients, especially those from underserved communities, face unique challenges in engaging patients[7]. If there are too many patients waiting, insufficient staff, and inadequate funding, it will be challenging for medical professionals to provide patients with meaningful care. However, using engagement strategies such as shared decision-making, patient education, and digital tools can positively impact these issues by improving patient satisfaction, adherence to treatment instructions, and tablet performance [8]. People acknowledge these strategies' importance, but not enough research focuses on how they relate to patient satisfaction in public hospitals where resources are scarce [7]. Multiple aspects, such as treatment results, safety, and how patients are

* Corresponding author: Fatima Al-Kaabi.

supported emotionally, are involved in the patient experience based on how much they are involved in their care. Several studies have proven that patients who are engaged in their treatment plans are more likely to follow their Doctor's instructions, manage their chronic illnesses effectively, and feel more confident in their healthcare providers. Poor patient engagement might result in unhappy patients, more errors by healthcare workers, and unnecessary repeat hospital visits [8]. Since public hospitals serve a diverse range of people from different backgrounds, including those with limited health awareness, special methods of patient involvement are necessary to provide equitable care. With new technology, people can utilise EHRs, health apps, and telehealth options to be more active in their healthcare. These tools enable patients to view their medical details at any time, consult with doctors online, and receive personalised reminders about their health [9]. Still, these medical technologies are not widely used in public hospitals because of difficulties in setting up the required systems and obtaining the funds needed. Furthermore, some patients lack the necessary skills to use technology, which can hinder the effectiveness of many tech-based approaches [10]. So, it is vital to learn what methods bring the best experience to patients so that resources can be managed efficiently by public healthcare systems. Listening to patient feedback is essential for engaging patients, so hospitals strive to hear what patients think about their care and treatment [11]. Still, many public hospitals struggle to utilise feedback for improvement, primarily due to slow bureaucracy or a lack of dedicated personnel. Analysing how patients react to various feedback methods can guide healthcare administrators in continually improving their organisation's services [12]. This research aims to determine how patient engagement practices affect patients' overall experience in public hospitals. The study aims to identify the most effective approaches to patient happiness by examining various patient engagement tools, including physician-patient communication, listening skills, and the use of technology. The results will contribute to the body of knowledge by suggesting tested strategies for healthcare administrators focused on patient involvement in public healthcare. Efficient patient engagement can improve health outcomes, decrease unnecessary hospital readmissions, and enhance the effectiveness of the healthcare sector.

2. Material and Methods

The cross-sectional, survey-based approach employed in the current study aimed to determine the level of engagement among patients in public hospitals in the UK. A cross-sectional study design is essential because it provides a contemporary view of a population at a particular moment, allowing the researcher to study the prevalence rate of specific attributes, behaviours, viewpoints, or states among a defined group. This design is valuable for determining patterns, identifying links between variables, and testing hypotheses [13,14]. It is also convenient and economical if the study considers a large population. It also supports the use of survey-based research, as it is the most effective way of data collection using a research instrument that enables the systematic collection of standardised data over a broad sample [14,15]. With structured questionnaires, the study can cover several aspects of perspective and quantify this information to use statistical tests, providing a deep understanding of the connection between different data points. The cross-sectional design's compatibility with surveys makes the approach incredibly useful for measuring existing trends, attitudes, or problems in a population without requiring long-term follow-up [16].

A quantitative research approach has been adopted to enable the objective measurement and statistical analysis of the resultant data. The quantitative approach ensures that the obtained results are based on numerical evidence, thereby enhancing the credibility and applicability of the results [17]. The quantitative research method is particularly useful in detecting patterns, hypothesis testing, and determining relationships among variables in a large sample. It also enables the researcher to analyse the responses given by the respondents easily since the data is collected in a structured way using instruments like surveys or questionnaires [18,19]. Overall, the quantitative approach facilitates a straightforward, data-oriented understanding of the research problem. This study employs a primary data collection method, utilising survey research instruments to evaluate patient engagement and experiences in the public hospital. The questionnaire consisted of three key sections: demographic data, patient engagement, and general patient experience. The demographic section gathers background information, including age, gender, marital status, residence, and access to healthcare. The central part of the questionnaire consisted of questions about the patient's perceptions regarding the quality of healthcare, communication with providers, participation in the decision-making process, accessibility, cleanliness of facilities, and promptness of services. It contains closed-ended questions and five-point Likert-scale items to rate certain features related to patient engagement efficiency and environmental comfort. Additionally, the instrument incorporates items adapted from other validated tools, such as the TeleVox Patient Engagement Survey and the Picker Patient Experience Questionnaire, making it relevant and reliable for measuring patients' views within public hospitals. The study's targeted population is patients who visit public hospitals in the UK. To collect the sample, this study employed a random sampling method that included patients from various groups, such as those of different ages and those with medical conditions, as well as hospital locations, including emergency, outpatient, and inpatient areas. The statistical power analysis was used to create solid findings and set the sample size at 95% confidence and 5% error, resulting in 386 respondents being finalised for the survey. Since public hospitals see

a large number of patients, studying the views of 386 people will provide reliable results and allow for consideration of any potential differences in who responds.

To collect data, the survey was conducted using an online Google form, and links were sent to all patients in public hospitals in the UK. To collect data for this study, an online survey was administered targeting patients who had received care in public hospitals across the United Kingdom. The questionnaire was created using an online form-building platform (e.g., Google Forms), allowing easy access and completion. Participants were contacted through multiple channels, including social media platforms (such as Facebook groups and Twitter), patient support forums, and direct email invitations. The survey link was sometimes shared via messaging apps like WhatsApp to enhance reach and participation. Before completing the survey, all participants were provided with a brief overview of the study's purpose, assured anonymity and confidentiality, and asked to give their informed consent. The survey included demographic questions, Likert-scale items, and open-ended responses to gather detailed insights into patient-provider communication, healthcare accessibility, and overall satisfaction. This approach ensured a diverse and representative sample while maintaining ethical standards and data integrity. To collect data, an online survey was conducted for this study. That target population included patients seeking treatment in the United Kingdom's public hospitals. The survey was designed using an online form-generation tool, such as Google Forms, which was conveniently accessed and completed. To recruit respondents for the study, social media platforms such as Twitter were utilised. After contacting the respondents, an email invitation and a link to the survey form were sent to them. The SPSS software was used because it is an advanced software that ensures accuracy in data processing and interpretation. Several statistical tests, including descriptive statistics, frequency distribution, t-test, ANOVA test, and regression analysis, were applied to analyse the quantitative dataset. Although this methodology yields beneficial results, certain limitations should still be considered. This is regarded as self-reporting bias if people give you answers that make them look good instead of truthful responses. Likewise, the cross-sectional design recognises the limitation of following changes over time; it will provide timely snapshots of the prevailing perception of patients. It is essential to make prompt adjustments to enhance quality in resource-constrained public hospitals. Moreover, this approach makes it difficult to see the connection between different strategies and changes in how patients feel over time.

3. Results and Discussion

The results of this study provide a comprehensive analysis of patient engagement strategies and their impact on overall experience in public hospitals, drawing from a diverse sample of 386 respondents. This section presents key findings across demographic characteristics, patient experience metrics, and engagement variables, offering descriptive and inferential statistical insights. The data reveal high patient satisfaction levels, notable patterns in communication quality, involvement in decision-making, and perceived respect. Subsequent analyses examine relationships between these variables through correlation tests, group comparisons, and regression modelling, highlighting which aspects of engagement most significantly influence patient perceptions. These results lay the groundwork for understanding how public hospitals can optimise engagement strategies to enhance care experiences amidst resource constraints.

Table 1 Demographic Characteristics of Respondents (N = 386)

Variable	Category	Frequency
Age Group	Under 18	73
	18–29	52
	30–44	67
	45–59	76
	60–74	53
	75 or older	65
Gender	Male	108
	Female	96
	I prefer not to say	182
Marital Status	Single	111
	Married	99

	Widowed	92
	Divorced / Separated	84
Place of Residence	Urban	123
	Suburban	126
	Rural	137
Health Insurance	Yes	87
	No	299
Healthcare Facility	Public hospital	239
	Private hospital	64
	Clinic / Health centre	67
	Others	16
Visit Frequency	First Visit	129
	2–3 times	144
	4–6 times	80
	More than 6 times	33
Chronic Illness	Yes	185
	No	120
	Prefer not to say	81

Source: Author's Estimation

Table 1 presents the demographic composition of the sample population. Participants were relatively evenly distributed across age groups, with the most significant proportion aged 45–59 years (19.7%), followed by those under 18 (18.9%) and 30–44 years (17.4%). The gender distribution shows a substantial number of respondents (47.2%) who preferred not to disclose their gender, while males and females accounted for 27.9% and 24.9%, respectively. Marital status was similarly diverse, with single (28.8%) and married (25.6%) individuals forming the majority, while 23.8% were widowed and 21.8% divorced or separated. In terms of geographic distribution, the respondents were nearly equally spread across rural (35.5%), suburban (32.6%), and urban (31.9%) areas, suggesting a broad spatial representation. Most (77.5%) lacked health insurance, highlighting a potential access barrier within the patient population. Most respondents received care at public hospitals (61.9%), which aligns with the study's focus, whereas 16.6% used private hospitals, 17.4% visited clinics or health centres, and only 4.1% reported using other facilities. The frequency of hospital visits varied: 37.3% of participants attended their first visit, another 37.3% had 2–3 visits, 20.7% had 4–6 visits, and only 8.6% reported more than six visits. Regarding health status, 47.9% disclosed having a chronic illness, 31.1% reported no chronic disease, and 21.0% preferred not to answer.

Table 2 Descriptive Statistics for Key Patient Experience and Engagement Variables

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Overall Experience (1-5)	386	1	5	4.42	.815
Satisfaction with Care (1-5)	386	1	5	4.33	.834
Effective Communication	386	0	2	1.73	.649
Involved in Decision-Making	386	0	2	1.68	.721
Felt Respected	386	0	2	1.77	.600
Accessibility (1-5)	386	1	5	4.30	.845

Timely Follow-Up	386	0	2	1.68	.692
Valid N (listwise)	386				

Source: Author's Estimation

Table 2 presents the descriptive statistics for patient experience and engagement variables. The findings show that patients reported a high overall experience with a mean score of 4.42, indicating intense satisfaction with the care received. Satisfaction with care also scored 4.33, reflecting a generally positive perception of service quality in public hospitals. Among engagement variables measured on a three-point scale, patients most strongly agreed that they felt respected during their care, with a mean of 1.77. Effective communication was also rated at 1.73, followed by timely follow-up and involvement in decision-making, scoring 1.68. Accessibility of services was rated favourably, with a mean score of 4.30, suggesting that patients found healthcare services relatively easy to reach. The responses demonstrate a consistent and positive experience with moderate patient engagement.

Table 3 Reliability Statistics

Cronbach's Alpha	N of Items
0.869	11

Source: Author's Estimation

Table 3 reports the internal consistency of the scale items used to measure patient engagement and experience. The Cronbach's alpha value of 0.869 indicates a high level of internal reliability across the 11 items. This suggests that the scale demonstrates strong internal consistency and that the items reliably measure a coherent construct related to patient engagement and overall experience.

Table 4 Correlation Matrix

		Overall Patient Experience	Patient Engagement Composite	Follow-up care instructions were clear and easy to follow.	Timely Follow-Up
Overall Patient Experience	Pearson Correlation	1	0.020	0.665**	0.078
	Sig. (2-tailed)		0.701	0.000	0.124
	N	386	386	386	386
Patient Engagement Composite	Pearson Correlation	0.020	1	0.003	0.011
	Sig. (2-tailed)	0.701		0.953	0.825
	N	386	386	386	386
Follow-up care instructions were clear and easy to follow.	Pearson Correlation	0.665**	0.003	1	0.010
	Sig. (2-tailed)	0.000	0.953		0.838
	N	386	386	386	386
Timely Follow-Up	Pearson Correlation	0.078	0.011	0.010	1
	Sig. (2-tailed)	0.124	0.825	0.838	
	N	386	386	386	386
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Author's Estimation

The correlation matrix presented in Table 4 examines the interrelationships among four key patient care variables: Overall Patient Experience, Patient Engagement Composite, clarity of follow-up care instructions, and Timely Follow-Up. The correlation analysis reveals a strong positive relationship ($r = 0.665$, $p < 0.01$) between Overall Patient Experience and the clarity of follow-up instructions. This statistically significant association indicates that patients who received more explicit post-care guidance reported better overall experiences. The finding highlights the crucial role of effective communication in improving patient satisfaction. No significant correlations were found between the Patient Engagement Composite and other variables ($p > 0.70$). The near-zero coefficients suggest that this composite measure does not have a meaningful relationship with patient experience or care quality indicators in this dataset. This unexpected result warrants further investigation into the construct's validity. Timely Follow-Up showed negligible associations with all variables ($p > 0.12$), indicating that promptness alone may not significantly impact patient perceptions. The weak correlations suggest that other factors beyond timing may be more influential in shaping care experiences.

Table 5 Independent T-Test

		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
		F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**95% Confidence Interval of the Difference**	
									Lower	**Upper**
Overall Patient Experience	Equal variances assumed	8.298	0.004	1.492	202	0.137	0.20903466	0.14007800	-0.06716798	0.48523729
	Equal variances not assumed.			1.477	185.884	.141	.20903466	.14156116	-0.07023836	0.48830767
Patient Engagement Composite	Equal variances assumed	3.237	0.073	-1.271	202	0.205	-0.17495682	0.13767750	-0.44642620	0.09651256
	Equal variances not assumed.			-1.281	201.939	0.202	-0.17495682	0.13658302	-0.44426862	0.09435499

Source: Author's Estimation

Table 5 provides the findings of an independent samples t-test to examine whether patient experience and engagement levels differ significantly by gender. The independent samples test examined gender differences in patient experience and engagement. Levene's test indicated unequal variances for Overall Patient Experience, with *an F-statistic of 8.298 (p* 0.004). However, no statistically significant gender difference was found, with males and females reporting similar experience levels. For the Patient Engagement Composite, equal variances were assumed with an F-statistic of 3.237 (p 0.073). These results suggest that neither overall patient experience nor engagement levels significantly differed by gender in this sample. The results suggest that gender may not be a critical factor in shaping these patient-reported outcomes, though further research with larger samples could validate these findings.

Table 6 ANOVA Estimates

		Sum of Squares	df	Mean Square	F	Sig.
Chronic Illness	Between Groups	9.854	5	1.971	1.325	0.253
	Within Groups	565.286	380	1.488		
	Total	575.140	385			
Overall Patient Experience	Between Groups	13.485	5	2.697	1.283	0.270
	Within Groups	798.764	380	2.102		
	Total	812.249	385			

Source: Author's estimations

The ANOVA results in Table 6 examine whether significant differences exist in Chronic Illness and Overall Patient Experience across different groups. The between-groups variation (Sum of Squares = 9.854, df = 5) was not statistically significant (F = 1.325, p = 0.253), indicating that chronic illness perceptions did not differ significantly across the compared groups. The lack of significance suggests that chronic illness status may not influence patient perceptions in this dataset. Similarly, the analysis revealed no significant differences in overall experience ratings across groups (F = 1.283, p = 0.270). The between-groups variance (Sum of Squares = 13.485, df = 5) was not large enough to conclude that any group had systematically higher or lower experience scores. Thus, the ANOVA results indicate that neither chronic illness status nor overall patient experience varied significantly across the tested groups. This suggests that the factors influencing these outcomes may be more individual-specific or influenced by variables not included in this analysis. Further research could explore alternative group classifications or additional predictors that might better explain variations in patient experience.

The estimated regression model examines the relationship between Overall Patient Experience, the dependent variable, and six independent predictors: Patient Experience Accessibility, Ease of Scheduling, Timely Follow-Up, Doctor Listening, and Facility Cleanliness. This multiple linear regression analysis aims to quantify how these specific healthcare service dimensions collectively and individually influence patients' overall satisfaction ratings. The model utilises standardised variables for the dependent and primary predictor, i.e., Patient Experience Composite, while the remaining independent variables maintain their original measurement scales.

Table 7 Descriptive Statistics

	Mean	Std. Deviation	N
Overall Patient Experience	0.00	1.00	386
Patient Experience	0.00	0.99	386
Accessibility	4.30	0.845	386
Ease of Scheduling	2.27	0.885	386
Timely Follow-up	1.68	0.692	386
Doctor Listened	1.73	0.504	386
Facility of Cleanliness	1.77	0.509	386

Source: Author's Estimation

Table 7 reveals the essential baseline characteristics of our variables. The dependent variable, Overall Patient Experience, and the Patient Experience Composite exhibit standardised distributions, i.e., a mean of 0 and a standard deviation of 1, indicating a normal distribution. Among the independent variables, accessibility stands out with the highest mean score (4.30 on its scale), suggesting generally positive patient evaluations. In contrast, Ease of Scheduling (mean = 2.27) and Timely Follow-up (mean = 1.68) receive lower average ratings, indicating potential areas for service improvement. The relatively small standard deviations for Doctor Listened (SD = 0.504) and Facility of Cleanliness (SD = 0.509) indicate consistent patient responses for these items.

Table 8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.966[a]	0.933	0.932	.260815592384939	0.933	880.117	6	379	0.000	0.093
a. Predictors: (Constant), Facility of Cleanliness, Patient Experience, Timely Follow-up, Ease of Scheduling, Accessibility, Doctor Listened										
b. Dependent Variable: Overall Patient Experience										

Source: Author's Estimation

Table 8: Model Summary presents the overall strength of our regression model. The exceptionally high R^2 value of 0.933 indicates that our model explains 93.3% of the variance in Overall Patient Experience—a powerful predictive relationship in social science research. The adjusted R^2 of 0.932 confirms this is not due to overfitting. The highly significant F-change statistics (880.117, $p < 0.001$) verify the model's overall validity. However, the extremely low Durbin-Watson statistic (0.093) raises a red flag about potential autocorrelation, suggesting that our error terms may not be independent—a vital assumption violation that could affect interpretation

Ta**ble 9** ANOVA Estimates for Estimated Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	359.219	6	59.870	880.117	0.000[b]
	Residual	25.781	379	0.068		
	Total	385.000	385			
a. Dependent Variable: Overall Patient Experience						
b. Predictors: (Constant), Facility of Cleanliness, Patient Experience Composite, Timely Follow-up, Ease of Scheduling, Accessibility, Doctor Listened						

Source: Author's Estimation

ANOVA Estimates in Table 9 provide further confirmation of model significance. The massive F-value of 880.117 ($p < 0.001$) shows that our set of predictors significantly improves our ability to predict Overall Patient Experience compared to a null model. The variance decomposition shows that the regression model accounts for 359.219 sum of squares, versus only 25.781 for residuals, demonstrating that our predictors explain most of the variation in Overall Patient Experience. This reinforces the exceptional explanatory power shown in Table 8, though the autocorrelation concern remains.

Table 10 Coefficient Estimates

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-0.083	0.105		-0.789	0.431	-0.289	0.123
	Patient Experience Composite	0.960	0.013	0.960	71.823	0.000	0.934	0.987
	Accessibility15	-0.012	0.016	-0.010	-0.782	0.434	-0.044	0.019
	EaseofScheduling	0.018	0.015	0.016	1.219	0.224	-0.011	0.048
	TimelyFollowUp	-0.008	0.019	-0.006	-0.421	0.674	-0.046	0.030

	DoctorListened	0.083	0.027	0.042	3.123	0.002	0.031	0.135
	FacilityCleanliness	-0.020	0.026	-0.010	-0.769	0.442	-0.072	0.031
a. Dependent Variable: Overall Patient Experience								

Source: Author's Estimation

Table 10: The coefficient estimates reveal the individual contributions of each predictor. The standout finding is the overwhelming dominance of the Patient Experience Composite ($\beta = 0.960$, $p < 0.001$), indicating that it accounts for nearly all the explanatory power in the model. Doctor Listened shows a small but significant positive effect ($\beta = 0.042$, $p = 0.002$). Surprisingly, four variables show non-significant effects: Accessibility ($p = 0.434$), Ease of Scheduling ($p = 0.224$), Timely Follow-up ($p = 0.674$), and Facility of Cleanliness ($p = 0.442$). The constant term is also non-significant ($p = 0.431$), suggesting the model passes through the origin when all predictors are zero. The collective interpretation suggests a model where general patient experience perceptions completely overshadow specific service dimensions in predicting overall satisfaction. Only physician attentiveness maintains a small independent effect. This may indicate that the patient experience composite captures the most relevant variance or that problematic multicollinearity is inflating its importance. The autocorrelation issue further cautions against over-interpretation. Practically, this suggests global experience measures may be more critical than specific service features, though the methodological concerns warrant verification through additional analyses.

The findings offer a valuable perspective on patient engagement approaches and their correlation with the overall patient experience in public hospitals, introducing a set of compelling questions that should be further discussed in light of the available literature [21-25]. The overall patient experience (4.42) and satisfaction with care (4.33) mean scores were relatively high; thus, it might be assumed that, despite the well-documented resource limitations of the public healthcare system, patients generally have positive experiences to report. This is consistent with the systematic review conducted by Alkhatib [26] who concluded that patient engagement strategies can overcome systemic challenges, leading to improved communication and trust between patients and providers. Patient engagement has become increasingly essential to shape healthcare outcomes and delivery [27]. It also has a significant impact on customer satisfaction and service quality. This interpretation is also supported by the positive scores for feeling respected (mean = 1.77) and efficient communication (mean = 1.73), highlighting the importance of interpersonal interactions in patient-reported care quality outcomes. These results contribute to the study by Keelson [28], who demonstrated that patient engagement enhances the quality of services by facilitating open communication and mutual decision-making, even in low-resource environments. The low correlation of the Patient Engagement Composite with other measurements, such as overall patient experience, is a significant challenge in most of the available literature. Although, the study conducted by Marshall et al. [29] demonstrated meaningful effects of patient engagement on research design and qualitative research findings, our quantitative indicators revealed insignificant correlations. Such inconsistency could be due to variations in the studies' operationalisation and measurement of engagement [22]. This indicates that standardised tools for measuring patient engagement in clinical practices require improvements [30]. Timely follow-up (mean = 1.68) and participation in decision-making (mean = 1.68) are relatively low, which implies that there are still systematic problems that engagement strategies cannot solve entirely, which is also reflected in the work of Chakaipa et al [31], regarding the issues of continuity of care in healthcare systems. However, the three tools provide deeper insight into the influence of Patient engagement (PE) at each research stage. Lessons learned from the study by Marshall et al [30], suggest that PE can impact various aspects of research, including design, process, and approach, thereby increasing the patient-centeredness of the study. Hence, the results of this study highlighted the significance of patient involvement in determining healthcare experiences and results, underscoring the necessity for healthcare institutions to adopt patient-centred care tenets and foster cooperative and empowered cultures. The regression analysis has produced exciting results, as the Patient Experience Composite proved to be a powerful indicator of overall satisfaction (= 0.960). Such an observation implies that the overall impression of the care provided to patients can outweigh the presence of any particular features of the services, which can also be explained by Cha et al. [32], findings regarding the holistic effect of engagement cultures in medical institutions. The low levels of influence of such aspects as the cleanliness of the facilities and convenience of scheduling on the overall level of satisfaction highlight a significant question of what exactly is the driver of patient experience in the public hospital, especially in contrast to the private healthcare setting, where these factors may be of greater importance. Patient-centred care requires careful planning, with patients involved at both entry and exit from the hospital. Focused communication, environmental adjustments, addressing complaints, and clearer discharge strategies are recommended. Groene et al [33], found no substantial associations between hospital-wide quality management strategies, patient involvement in quality management, or patient-centred care strategies with patient-reported experience measures.

These findings, when evaluated in the context of the broader literature, suggest that although the use of patient engagement strategies has the potential to enhance the experiences of public hospitals, their implementation process must be carefully tailored to the specific context. The high score of relational (as opposed to more structural) components of care (communication, respect) relative to other, more structural levers of engagement points to the fact that interpersonal factors may be the most quickly leverageable domain of quality improvement in low-resource settings. Such an interpretation is reinforced by the qualitative study by Rapport et al. [34], where the investigators cited communication and emotional support as the key factors in patient satisfaction. However, the ongoing issues with follow-up care and involvement in decision-making, as well as the surprisingly poor performance of the engagement composite, suggest that the existing engagement concepts may require modification to suit the setting of public hospitals.

The study highlighted the significant role of patient engagement strategies in influencing positive healthcare experiences in public hospitals, despite the challenges posed by limited resources and systemic restrictions. This data demonstrates that most patients are delighted with the care they receive, especially appreciating the interpersonal elements of care, such as respectful communication and emotional support from health professionals [35]. These relational ingredients seem to trump structural aspects of engagement, which implies that in resource-limited settings, the fineness of patient-provider interactions could be more critical than official forms of engagement or infrastructural enhancements. Nevertheless, the study also reveals serious loopholes in the existing engagement strategies. The modest relationships between composite engagement measures and patient experience outcomes suggest the possibility of a gap between how healthcare systems conceptualise engagement and how patients experience and appreciate it [1,3]. The ongoing difficulties with follow-up care and shared decision-making only highlight that although engagement strategies are promising, their application in the public hospital setting needs to be more carefully adapted to overcome structural issues and meet the needs of patients [36]. When placed in the context of the larger literature base, these findings imply that effective patient engagement in publicly funded healthcare facilities might not require standardised programs as much as it needs to encourage meaningful and personal interactions between patient and provider [37].They should concentrate on creating more sensitive measuring instruments to evaluate engagement, study the socioeconomic and cultural determinants that affect patients' expectations, and determine how engagement methods could be incorporated into the regular care process sustainably [38]. Finally, this work advances the emerging body of knowledge on patient-centred care by showing that in publicly funded hospitals, the human aspects of clinical care-compassion, communication, and respect could be the most potent positive patient-experience determinants even within the framework of structural constraints. The way forward is to strike a balance between these relational priorities and systematic changes that can create healthcare settings where both patients and providers can thrive.

4. Conclusion

This paper highlights the fact that in publicly funded hospitals with limited resources, actual patient engagement is not the result of program standardization, but rather the basic human interaction of compassionate communication, mutual respect, and emotional support. These elements are more effective than structural interventions or formal measures in determining positive care experiences. The study's results promote a new patient engagement approach, which excludes bureaucratic measurement instruments and focuses on establishing meaningful provider-patient relationships, considering the contextual limitations without compromising human dignity in healthcare services. These findings reveal the need to answer some critical questions in future studies. The cross-sectional nature of this study restricts the establishment of causal relationships, and theree is a possibility of self-reporting biasesdue tor the invalidity of the satisfaction measures. Such methodological limitations reflect the difficulties noted in other studies by Barello et al. [39] and Hibbard and Greene [40], who have called upon the research community to conduct more longitudinal and mixed-methods studies regarding patient experience. The Generalizability of findings to other healthcare settings may also be affected by the demographic makeup of our sample, especially the large number of uninsured patients. Moreover, exploring the reasons behind the poor correlations of formal engagement measures with experience outcomes may allow for improving measurement strategies. Second, some research on the role of socioeconomic factors and health literacy in making engagement effective would greatly benefit our sample, particularly in addressing its peculiarities. Third, longitudinal studies that follow changes in experience measures and clinical outcomes over time following engagement strategies would help inform policy-relevant decisions more confidently. With healthcare systems worldwide insisting on patient-centred care, the findings provide valuable information on applying engagement strategies in challenging settings and highlight knowledge gaps in areas that still need to be addressed. The article finally supports the importance of patient engagement. It warns against universal strategies, indicating that individualized plans emphasizing the most valuable interactions could produce the most significant effects in the public hospital environment.

Compliance with ethical standards

Disclosure of conflict of interest

There is no conflict of interest of the author

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