

Integrating CSR into Healthcare: A Comprehensive Strategy Focusing on Accessibility, Patient-Centric Care, Employee Well-being, and Regulatory Compliance

¹J.Benila Pearl, ²Dr.M.Palanivel Rajan

¹Guest Lecturer Department of Entrepreneurship Studies Madurai Kamaraj University Madurai.

Mail id: benilapearl28@gmail.com

²Assistant Professor Department of Management Studies Madurai Kamaraj University Madurai

palanivelrajan778@gmail.com

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ABSTRACT

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CSR, or corporate social responsibility, deals to the responsibilities of companies to adopt policies, make choices, and undertake actions that align with the objectives and values of our society. CSR in healthcare refers to the dedicated effort undertaken by healthcare organisations to go beyond their core objective of delivering medical services. It entails participating in activities and efforts that support for socially responsible practices. Healthcare CSR projects involve a diverse range of activities, including community outreach programmes, health education, environmental sustainability efforts, and philanthropic ventures. These programmes show a dedication to not only addressing the immediate healthcare requirements of patients, but also the wider societal factors that influence health. By doing this, healthcare organisations can act as agents that stimulate positive transformation, promoting for well-being, fairness, and long-term growth. The practice of philanthropy resulted in enhancements in both staff and customer relations. The objective of the paper is to develop a multiple regression model to study the impact of activities in healthcare like access to healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR. The primary data for the study was collected from the public and private hospitals of South Tamil Nadu. The results of the study based on multiple linear regression model shows that correlation in impact of work force wellbeing and patient centred care on CSR. The analysis also determined investing more on wellbeing of workforce and patient centred care will boost CSR activates of the hospitals.

Keywords: CSR, Access to health care, workforce wellbeing, Regulatory Compliance, Patient Centred Care

INTRODUCTION

Corporate social responsibility (CSR) is to a company's conscious and planned efforts to conduct its commercial operations in a manner that is both ethical and socially responsible (Aguilera et al. 2007, Tai and Chuang 2014). Howard Rothmann Bowen, an American economist, initially formulated the concept of Corporate Social Responsibility (CSR) in 1953. CSR, as defined by Bowen (1953), encompasses the responsibilities of organisations to make decisions, establish policies, and take actions that promote the values and goals of society. Kashyap, R., et al (2004) provided a definition of CSR as a corporate strategy that creates lasting value for shareholders by capturing opportunities and mitigating risks that arise from socially responsible choices. Agarwal, A. (2013) corporate Social Responsibility (CSR) provides real opportunities for firms to actively participate in a range of activities that directly or indirectly contribute to the well-being of society. Siniora, D. (2017) corporate Social Responsibility (CSR) in the health care sector, namely in hospitals and pharmaceutical businesses, should aim to foster the adoption of shared values and universal ethical standards in the development of new models of hospital governance. Within the realm of healthcare, social responsibility encompasses a wider range of concerns, such as human rights, gender equality, child labour, and environmental difficulties. The health care sector is expected to

adhere to strict ethical standards and provide medical care to all individuals. Lubis, A. N. (2018) the traditional perspective of Corporate Social Responsibility (CSR) solely emphasised philanthropic endeavours or the resolution of societal issues. Currently, there has been a shift in the paradigm where businesses are now responsible for addressing environmental and social issues.

The International Bioethics Committee of UNESCO's Report on Social Responsibility and Health has examined the notion of social responsibility within the framework of healthcare provision, proposing a novel approach to hospital governance. International certification of social responsibility—Social accountability refers to the responsibility of individuals and organisations to be transparent, responsive, and accountable to the needs and interests of society as a whole. SA 8000 and ISO 26000 are global standards aimed at implementing improved working conditions, drawing upon the principles outlined by the International Labour Organisation, the United Nations Convention on Children's Rights, and the Universal Declaration of Human Rights. Brandão, C., et al (2013) define social responsibility as the focus on how an organisation handles its internal operations and the effects of its activities on the social environment. This idea also encompasses policies aimed at safeguarding society from hazardous waste and preventing harm to animals in research. This form of social responsibility encompasses elements such as adherence to the law, avoidance of environmental harm, and safeguarding the interests of all parties involved in the provision of healthcare. Implementing socially responsible practices can be a crucial measure for a hospital to enhance its competitiveness and safeguard its public perception. For instance, a hospital that prioritises social responsibility should do an analysis to determine the appropriate method for securely treating or disposing of a waste product that has the potential to contaminate the environment.

Carroll proposed a hierarchical model called the Pyramid of Corporate Responsibilities. At the base of the pyramid are economic obligations, followed by legal obligations, and then moral obligations, which involve acting in a righteous, equitable, and fair manner while minimising harm to stakeholders. At the top of the pyramid are philanthropic obligations, which involve enhancing the overall well-being of the community. Singh, S. (2010) the Indian corporate social responsibility (CSR) initiatives have predominantly focused on philanthropic endeavours. The businessman previously allocated a portion of their earnings towards supporting initiatives for freedom reforms and reinvested the remaining funds into establishing new industries. Currently, CSR initiatives mostly focus on the educational and health sectors, with limited attention given to empowering women, promoting sustainable livelihoods, and developing infrastructure. However, it is essential for enterprises to not simply spend money for the sake of benefiting society, but also to ensure that it brings advantages to the firm itself. This programme is a significant step towards implementing strategic Corporate Social Responsibility (CSR), which encompasses socially responsible investment. Stakeholder Theory considers the interests and rights of all individuals and organisations involved in and impacted by business decision-making. Stakeholders encompass several entities including as management, employees, shareholders, consumers, suppliers, society, and the community. This theory posits that the primary objective of any organisation or company is to thrive and benefit all its stakeholders. The statement suggests that profit maximisation is not inherently problematic, but rather becomes problematic when managers prioritise profit-maximizing measures over activities that benefit key stakeholders, such as society.

Lamba, J., and Jain, E. (2022) global corporations have recognised that their survival and expansion depend on the support of society, and meeting the demands of the nation will enhance the company's reputation in the future. Engaging in corporate social responsibility (CSR) initiatives will contribute to the attainment of sustainable objectives. Numerous firms have recognised the significance of repaying society for its role in fostering the company's development. Trivedi, P., Narang, R., and Fellow, S. R. (2017) corporate Social Responsibility (CSR) can significantly contribute to the advancement of sustainable healthcare practices in India. It must address multiple areas, such as raising awareness about disease prevention and treatment, organising health check-up camps, promoting hygiene and sanitation, training hospital staff to minimise waste in all forms, implementing proper recycling practices, promoting the benefits of connecting with nature, and using energy-efficient equipment for lighting and cooling. Turban & Greening, (1997) effective employee relations significantly influence the operational efficiency of organisations. It encompasses factors such as reduced employee turnover, enhanced productivity, heightened motivation, and greater loyalty. These facts are well recognised and accepted. The problem that worries

organisations is the potential for a firm's corporate social performance to give them a competitive advantage in attracting job seekers. Cochran, (2007) the fundamental component of a majority of prosperous companies is a superior client experience. Satisfied customers are more inclined to establish a long-term relationship with the company.

LITERATURE REVIEW

In a study conducted by Lubis, A. N. (2018), a total of 200 hospital patients from four government hospitals in Medan City, Indonesia was included. The study's findings offer factual proof that corporate social responsibility (CSR) has a favourable impact on the hospital's reputation, patient loyalty, and total value. The findings suggest that implementing CSR as a strategic tool can enhance the hospital's value. Rohini, R., and Mahadevappa, B. (2010) analyse the perceived societal obligations of five non-profit hospitals in Bangalore, India. A survey was conducted among 79 physicians and 104 managers and other stakeholders of the hospitals to gather data. The investigation demonstrates substantial disparities in the perception of job duties between physicians and other individuals involved. Hospitals must consider the social, cultural, and financial attributes of patients when fulfilling their civic responsibilities. The hospitals' CSR operations can be enhanced by addressing current needs such as providing training, conducting environmental impact audits, and promoting employee participation in local voluntary organisations.

Haddiya, I., Janfi, T., & Guedira, M. (2020) sustainability in the context of healthcare organizations encompasses Social Responsibility (1. Quality and relevance of care: providing the best care possible according to current scientific advances 2. Accessibility of care (cost, waiting time to access consultation or hospitalization) 3. Compliance to the law: regulations, taxes, labour law for the employees 4. Community support: raising awareness about diseases and spreading the word about prevention methods among the community 5. Creating jobs) Ethics, Environment (Managing wastes with respect to the environment, Transparency of the practices), Economy. Sharma, S. G. (2009) while corporate philanthropy and community development continue to be significant aspects of India's corporate social responsibility (CSR), the advent of globalisation has brought about the rise of the multi-stakeholder approach. Under this approach, firms bear responsibility for all stakeholders, encompassing employees as well as community and financial stakeholders. The approach necessitates the integration of CSR into a viable and enduring business strategy. The key to achieving greater sustainability for a business is to adopt, demonstrate, and practise comprehensive approaches to business. This involves integrating financial drivers with sustainable development performance, such as social equity, environmental protection, and economic growth, into the mainstream business strategy and embedding them within the organisation.

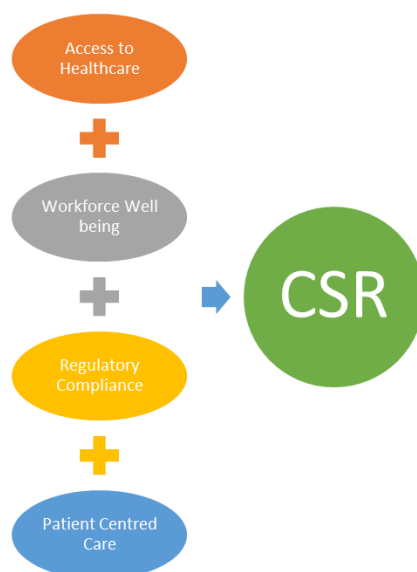


Figure 1: Conceptual frame work

Alvarez (2017) and Smith (2010) emphasise the significance of corporate social responsibility (CSR) in facilitating healthcare accessibility. Alvarez's research on a privately-owned tertiary hospital in the Philippines showcases the influence of corporate social responsibility (CSR) initiatives in delivering high-quality and cost-effective healthcare to economically disadvantaged patients. Smith's examination of the healthcare insurance business highlights the potential advantages of corporate social responsibility (CSR) initiatives in tackling healthcare concerns and enhancing public health. These studies emphasise the significance of corporate social responsibility (CSR) in advancing the availability of healthcare, specifically for marginalised communities.

Multiple studies have repeatedly demonstrated a favourable correlation between corporate social responsibility (CSR) and the well-being of employees in the healthcare industry. A study conducted by Ahmad (2023) shown that the implementation of corporate social responsibility (CSR) policies has the potential to alleviate burnout among healthcare workers. This positive effect is mediated by subjective well-being and compassion. Radzi (2020) highlighted the need of including staff wellness and health programmes into CSR projects, as they can bolster employee motivation and engagement. Holman (2004) emphasised the adverse consequences of job design and performance monitoring on employee well-being, indicating the necessity of implementing CSR activities to alleviate these effects. Ma (2022) further elucidated the connection between corporate social responsibility (CSR) and employee psychological well-being by showcasing the intermediary function of self-regulatory resources. These studies jointly emphasise the importance of corporate social responsibility (CSR) in enhancing the welfare of healthcare staff.

According to Lay (1972), patient-centred care entails the active participation of patients and their families in making healthcare decisions, with a specific emphasis on their objectives and requirements. Flood (2018) highlights the significance of treating patients, carers, and families with dignity and respect, as well as involving them in shared decision-making, therefore reinforcing this approach. Westbrook (2015) and Buell (2016) emphasise the need of proficient communication and assistance, along with the necessity for a transition towards a cooperative and equitable alliance among healthcare providers, patients, and their families. These studies emphasise the significance of patient-centered care in the delivery of healthcare.

OBJECTIVES

1. To analyse CSR activities delivered by the hospitals
2. To analyse the impact of access to healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR
3. To find out relationship between hospital type and welfare facilities for the employees
4. To find out the relationship between year of service of hospital and courses offered and method of waste disposal

METHODOLOGY

Empirical literature suggests that the CSR is determined by several variables. The present study uses one dependent variable and three independent variables. The dependent variable was CSR and independent variables are access to healthcare, regulatory compliance, workforce wellbeing and patient centred care. The study was conducted by using the survey method using structured questionnaire. The 5-point Likert scale was used and 25 statements were framed to access the factors CSR, access to healthcare, regulatory compliance, workforce wellbeing and patient centred care. The participants of the study were 185 Hospitals of the South Tamil Nadu. Five Districts of south Tamil Nadu was selected purposively because higher number of hospitals available when compare to other districts in Tamil Nadu. For the study from 5 districts using stratified random sampling samples are grouped in strata and are collected for study. The data was collected from 5 Government Hospitals, 27 PHC, 2 ESI and 151 private hospitals. The sample size is found to be 185 with error margin 5% of acceptance of error at significant. In the study we had followed the privacy and safety of the respondents. The SPSS software package is used to analysis the data. To find out relationship between type of hospitals and welfare facilities available for employees, disposal of bio medical wastes, years of service and courses offered chi square test is used.

To find out the relationship between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care Multiple linear regression analysis was performed. (Alexopoulos, E. C. 2010) The purpose of regression is to predict Y on the basis of X or to describe how Y depends on X (regression line or curve) $X_1, X_2, \dots, X_k$ [Y The X_i ($X_1, X_2, \dots, X_k$) is defined as “predictor”, “explanatory” or “independent” variable, while Y is defined as “dependent”, “response” or “outcome” variable. (X. Schneider, A., et al 2010) A multivariable linear regression to study the effect of multiple variables on the dependent variable. In the multivariable regression model, the dependent variable is described as a linear function of the independent variables X_i , as follows: $Y = a + b_1 \times X_1 + b_2 \times X_2 + \dots + b_n \times X_n$. The model permits the computation of a regression coefficient b_i for each independent variable X_i . The coefficient of determination describes the overall relationship between the independent variables X_i and the dependent variable Y. It corresponds to the square of the multiple correlation coefficient, which is the correlation between Y and $b_1 \times X_1 + \dots + b_n \times X_n$. Regression line for a multivariable regression $Y = a + b_1 \times X_1 + b_2 \times X_2 + \dots + b_n \times X_n$, where Y = dependent variable X_i = independent variables a = constant (y-intersect) b_i = regression coefficient of the variable X_i . (Y. Rao, C. R., and Toutenburg, H. 1995)

Correlation coefficients reveal the degree and direction of the association between two continuous variables. If $r = \pm 1$: linear and monotone connection that is ideal. The greater the strength of the link, the closer r is to 1 or -1. $r = 0$: absence of any linear or monotonic connection $r < 0$: an inverse, negative association (high values of one variable tend to occur together with low values of the other variable) good association when $r > 0$ (high values of one variable tend to occur together with high values of the other variable) (Schneider, A., et al 2010). The linear regression analysis uses the mathematical equation, i.e., $y = mx + c$, that describes the line of best fit for the relationship between y (dependent variable) and x (independent variable). The linear regression analysis utilizes the mathematical equation $y = mx + c$ to explain the line of best fit for the connection between the dependent variable y and the independent variable x. (independent variable). The regression coefficient, r^2 , indicates the amount of variation in y caused by x. The coefficient of determination is the proportion of total variation in the dependent variable that can be accounted for by change in the independent variable (s). When R^2 is equal to one, there is a perfect linear connection between x and y, meaning that 100 percent of the variation in y can be accounted for by change in x (Kumari, K., and Yadav, S. 2018).

DATA ANALYSIS AND DISCUSSION

This part includes Health Infrastructure profile of the hospitals, activities done by hospital findings of the test and results of survey.

Hospital Profile and its activities

The following **table 1** shows the activities done by hospital.

Table 1: Hospital Profile and its activities

	Classification	Percentage
Type of Hospitals	Public	2.7
	Private	81.6
	PHC	14.6
	ESI	1.1
Years of Service	Less than -5 Years	13.0
	6-10 Years	24.9
	11-15 Years	35.7
	More than 16 Years	26.5
Courses	Yes	34.6
	No	65.4
	Buried in pit	31.4

Disposal of Bio Medical Waste	Burnt	10.3
	Outsourced	40.5
	Others	17.8
	Free refreshment	9.2
Welfare facility for employees	Concession in treatment for family members	69.7
	Kids education Allowance	.5
	Crèches	3.2
	Transportation	6.5
	Others specify	10.8

From the above table it is found that majority of the hospitals are private and study was mainly focussed on the hospitals established more than 10 years. The majority of the hospitals outsourced the bio medical wastes. Majority of the hospitals provide Concession in treatment for family members

Welfare facilities provided to Employees

The welfare facilities provided by the hospitals to the employees will be different. To find out the type of hospitals and welfare facilities provided Chi square test is used. The result was summarized in **table 2**

Table 2: Welfare facilities provided to Employees

Welfare								Chi square	sig
Type of Hospital		Free refreshment	Concession in treatment for family members	Kids education Allowance	Crèches	Transportation	Others	41.011 ^a	.000
	Public	0	3	0	1	1	0		
	Private	11	104	0	5	11	20		
	PHC	4	22	1	0	0	0		
	ESI	2	0	0	0	0	0		

Table 2 shows that chi square test used to determine the relationship between type of hospital with respect to welfare facilities provided to staffs. The results from the table reveal that statistically there is significant difference between type of hospital with respect to welfare facilities provided to staffs, $P=.000$ ($P<.05$). Therefore, null hypothesis was rejected. From the table infer that majority of the hospital provide Concession in treatment for family members. Hospitals often provide concessions or discounts on treatment for family members to promote the health and well-being of family members is in line with the main goal of fostering a healthy community. Granting privileges to relatives adds to the overall objective of communal health and welfare. Healthy families are vital for the holistic well-being of a community, and hospitals may perceive this as an opportunity to discharge their social responsibility. Providing treatment discounts to family members of hospital employees can be a strategic choice that may improve the hospital's reputation and promote a positive work atmosphere.

Courses Offered by Hospitals

The Courses offered by the hospitals will vary with respect to year of Service. To find out the relationship between courses offered by the hospital and year of service Chi square test is used. The result was summarized in **table 3**

Table 3: Courses Offered by Hospitals

Years	Courses			chi-square	Sig
		Yes	No		
	Less than -5 Years	5	19	44.244 ^a	.000
	6-10 Years	0	46		
	11-15 Years	29	37		
	More than 16 Years	30	19		

Table 3 shows that chi square test used to determine the relationship between year of service with respect to courses offered by the hospitals. The results from the table reveal that statistically there is significant difference between year of service with respect to courses offered by the hospitals, $P=.000$ ($P<.05$). Therefore, null hypothesis was rejected. Hospitals established more than 16 years provide the courses. The establishment of educational courses in hospitals in service over 16 years demonstrates a dedication to providing high-quality healthcare, continuing professional growth, compliance to regulatory requirements, and a commitment to enhancing patient care.

Disposal of Bio Medical Wastes

The bio medical wastes disposal method by the hospitals will be differ. To find out the type of hospitals and disposal of Bio Medical Wastes Chi square test is used. The result was summarized in **table 4**

Table 4: Disposal of Bio Medical Wastes

Type_of_hospital	Bio Medical					Chi square	Sig
		Buried in pit	Burnt	Outsourced	Others		
	Public	0	0	5	0	52.945 ^a	.000
	Private	38	12	68	33		
	PHC	20	7	0	0		
	ESI	0	0	2	0		

Table 4 shows that chi square test used to determine the relationship between type of hospital with respect to method to dispose bio medical waste. The results from the table reveal that statistically there is significant difference between type of hospital with respect to method to dispose bio medical waste, $P=.000$ ($P<.05$). Therefore, null hypothesis was rejected. Most of the hospital outsource the Bio medical wastes. In private hospital the wastes are outsourced and in PHC the bio medical wastes were buried in pit. Biomedical waste comprises substances that have the potential to cause infection and require particular processes for processing and disposal in order to prevent pollution of the environment and safeguard public health. Properly managing biological waste requires specialised knowledge and experience in order to adhere to environmental legislation and safety norms. Hospitals may depend on skilled personnel with the necessary expertise to effectively handle and dispose of biomedical waste by outsourcing to a specialised waste management company. The practice of waste disposal through burial in a pit, namely in Primary Health Centres (PHCs) in some regions, can be attributed due to certain

places, particularly rural or underdeveloped ones, may have restricted availability of advanced waste management infrastructure. Utilising a pit for waste disposal could serve as a simple and readily available approach for healthcare organisations facing limited resources.

Relationship between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care

To find out the strength and direction of a relationship between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care correlation coefficient is used. The **table 5** shows the correlation between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

Table 5: Correlation between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care

		CSR	Access to Healthcare	Workforce Wellbeing	Regulatory Compliance	Patient Centred Care
Pearson Correlation	CSR	1.000	.143	.655	.239	.544
	Access to Healthcare	.143	1.000	.229	.398	.083
	Workforce Wellbeing	.655	.229	1.000	.280	.696
	Regulatory Compliance	.239	.398	.280	1.000	.354
	Patient Centred Care	.544	.083	.696	.354	1.000
Sig. (1-tailed)	CSR	.	.026	.000	.001	.000
	Access to Healthcare	.026	.	.001	.000	.131
	Workforce Wellbeing	.000	.001	.	.000	.000
	Regulatory Compliance	.001	.000	.000	.	.000
	Patient Centred Care	.000	.131	.000	.000	

In the above table 2 the value of correlation coefficient (r) for CSR and access to healthcare is 0.143 i.e., $r > 0$; positive relationship (high values of one variable tend to occur together with high values of the other variable) as per previous researcher (X. Schneider et al 2010). From the above table $r = .143$ indicates weak correlation (as per Patrick Schober et al 2019 0.10 to 0.39 indicates weak correlation) Therefore, it is observed from table 2 there is a weak positive association (0.143) between CSR and access to healthcare. This indicates that growth in CSR will result in increase in access to healthcare and also vice versa.

In the above table the value of correlation coefficient (r) for CSR and workforce wellbeing is .655 i.e., $r > 0$; indicates positive relationship. Therefore, it is observed from table 2 the connection between CSR and workforce wellbeing is positive (.655) and Moderate correlation (as per Patrick Schober et al 2019 0.40–0.69 indicates Moderate correlation). This suggests that a rise in the CSR will result in a rise in the workforce wellbeing, and vice versa.

In the above table 2 the value of correlation coefficient (r) for CSR and Regulatory Compliance is .239 $r > 0$; positive relationship. From the above table $r = .239$ indicates weak correlation (as per Patrick Schober et al 2019 0.10 to 0.39 indicates weak correlation) Therefore, it is observed from table 2 there is a weak positive association (0.239)

between CSR and Regulatory Compliance. This indicates that growth in CSR will result in increase in Regulatory Compliance and also vice versa.

In the above table the value of correlation coefficient (r) for CSR and Patient Centred Care is .544 i.e., $r > 0$; indicates positive relationship. Therefore, it is observed from table 2 the connection between CSR and Patient Centred Care is positive (.544) and Moderate correlation (as per Patrick Schober et al 2019 0.40–0.69 indicates Moderate correlation). This suggests that a rise in the CSR will result in a rise in the Patient Centred Care, and vice versa.

Impact of access to healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR

To find out the impact of access to healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR regression analysis is used. The table 3 shows the regression table of CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

Table 6: Regression analysis CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	F	Sig.
1	.667 ^a	.445	.443	1.0407	2.136	36.134	.000

a. Predictors: (Constant), access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

b. Dependent Variable: CSR

To find out the association between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care the correlation coefficient is used. The correlation coefficient observed from the above table is .667, indicating moderately correlated. According to (Patrick Schober et al 2019) 0.40–0.69 indicates moderate correlation

To find out the degree of variability of CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care coefficient of variation is used. According to (Kumari, K., and Yadav, S. 2018) The regression coefficient, r^2 , indicates the amount of variation in y caused by x . The coefficient of determination assesses how much of the total variance in the dependent variable can be accounted for by the independent variable (s). According to the above table, the values of R square and adjusted R square are 0.445 and 0.443, indicating that access to healthcare, regulatory compliance, workforce wellbeing and patient centred care increase accounts for about 45% of the variance in CSR.

Test for significance

F test is used to see whether the regression model is statistically significant. According to (Sureiman, O., and Mangera, C. M. 2020) F test is used to determine whether or not the full regression model is statistically significant. The F- statistic indicates whether the regression model better fits the data than a model with no independent variables. In essence, it influences the overall usefulness of the regression model. If the $P < \text{significance level}$, there is enough evidence to infer that the regression model fits the data better than the model with no predictor variables. From the above table 3 $F = 36.134$, $P = 0.000$. Since $P < \alpha (0.05)$, there is a relationship between CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care. The linear regression model, $y = mx + c$, gives a better fit than the model resulting in $Y = b_0$ without the independent variables. It indicates that the model has more precision owing to the independent variables. The linear regression analysis applies the mathematical equation $y = mx + c$ to explain the line of best fit for the connection between the dependent variable y and the independent variable x (independent variables). (Kumari, K., and Yadav, S. 2018). In this study, the dependent variable(Y) is CSR, independent variable(X) is CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

Durbin–Watson statistic is a test statistic used to detect the presence of autocorrelation at lag 1 in the residuals (prediction errors) from a regression analysis. If the Durbin–Watson statistic is substantially less than 2, there is evidence of positive serial correlation

Mathematical representation of linear relationship

To determine the relationship impact of access to healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR the regression equation is used.

Table 7: Variables in the regression analysis CSR and access to healthcare, regulatory compliance, workforce wellbeing and patient centred care.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.854	.446		4.155	.000
Access to Healthcare	-.020	.177	-.007	-.116	.908
Workforce Wellbeing	1.482	.220	.536	6.732	.000
Regulatory Compliance	.097	.176	.036	.552	.582
Patient Centred Care	.432	.221	.159	1.953	.050

a. Dependent Variable: CSR

The regression equation is from the table 4 is,

$$Y = 1.854 - .020X_1 + 1.482X_2 + .097X_3 + .432X_4$$

Where, Y = **CSR**, X₁ = **Access to Healthcare**, X₂ = **Workforce Wellbeing**, X₃ = **Regulatory Compliance**, X₄ = **Patient Centred Care**

Here the coefficient of X is 1.854 represents the effect of healthcare, regulatory compliance, workforce wellbeing and patient centred care on CSR as constant. Since significant value is less than .05 i.e., .098 the influence of access to healthcare on CSR is not significant. The estimated X₁ implies that access to healthcare will not stimulates CSR.

Since significant value is less than .01 i.e., .000 the influence of Workforce Wellbeing on CSR is significant. The estimated positive sign in X₂ implies that Workforce Wellbeing stimulates CSR positively. Workforce Wellbeing would increase by 1.48 for every unit increase in CSR and this coefficient value is significant at 1% level. This indicate that Workforce Wellbeing has positive effects on the CSR. The link between employee well-being and corporate social responsibility (CSR) in hospitals is based on the concept that socially responsible and ethical activities foster a favourable workplace culture, employee engagement, and a feeling of meaning among staff members. Hospitals that prioritise corporate social responsibility (CSR) are likely to establish environments that foster the comprehensive well-being of their workforce, ultimately yielding benefits for both the employees and the organisation as a whole.

Since significant value is greater than .05 i.e., .582 the influence of Regulatory Compliance on CSR is not significant. The estimated X₃ implies that Regulatory Compliance will not stimulates CSR.

Since significant value is equal to .05 i.e., .050 the influence of Patient Centred Care on CSR is significant. The estimated positive sign in X₄ implies that Patient Centred Care stimulates CSR positively. Patient Centred Care would increase by .432 for every unit increase in CSR and this coefficient value is significant at 1% level. This indicate that Patient Centred Care has positive effects on the CSR. Patient-centered care and corporate social responsibility (CSR) are linked by common ideals of openness, inclusiveness, ethical conduct, and community

involvement. Hospitals that prioritise patient-centered care contribute to corporate social responsibility (CSR) by cultivating favourable patient experiences, tackling healthcare disparities, and actively involving themselves with their communities to advance health and well-being.

CONCLUSION

The interaction between healthcare accessibility, employee welfare, adherence to regulations, and patient-focused treatment, all within the context of Corporate Social Responsibility (CSR), highlights the significant influence that healthcare organisations may have on both individual well-being and the overall welfare of society. Access to healthcare encompasses more than just its availability, as it also involves guaranteeing affordability, inclusion, and fair distribution of services. Healthcare organisations contribute to corporate social responsibility (CSR) aims by advocating for accessibility, which in turn promotes healthier communities and helps solve structural health disparities. Ensuring the well-being of the staff is a fundamental aspect of corporate social responsibility (CSR) in the healthcare sector. This acknowledges the need of having a healthy and committed workforce in order to deliver high-quality care. Organisations that give priority to the well-being of their employees not only meet their ethical responsibilities but also improve their capacity to provide excellent healthcare services. Regulatory compliance is an essential component of corporate social responsibility (CSR), demonstrating an organization's dedication to ethical conduct, openness, and conformity to established norms. Compliance guarantees that healthcare organisations function responsibly, including reducing risks and establishing confidence with stakeholders. The concept of patient-centered care, which prioritises empathy, communication, and personalised therapy, is fully compatible with CSR objectives. By giving priority to the needs and experiences of patients, healthcare organisations not only enhance clinical outcomes but also exhibit a dedication to social responsibility. The convergence of these aspects creates a potent connection via which CSR in healthcare contributes to a comprehensive and enduring healthcare environment. By addressing these dimensions, healthcare organisations fulfil their main duty of providing medical services while also actively contributing to the development of a socially responsible and compassionate healthcare environment for the well-being of individuals and society as a whole. As healthcare progresses, it is crucial to incorporate CSR principles to ensure that the industry continues to have a beneficial impact on societal well-being.

REFERENCES

- [1] Agarwal, A. (2013). Corporate Social Responsibility: An Indian Perspective. In Journal of Business Law and Ethics (Vol. 1, Issue 1). www.aripd.org/jble
- [2] Ahmad, N., Ullah, Z., Ryu, H. B., Ariza-Montes, A., & Han, H. (2023). From Corporate Social Responsibility to Employee Well-Being: Navigating the Pathway to Sustainable Healthcare. *Psychology Research and Behavior Management*, 1079-1095.
- [3] Alvarez, J. S. (2017). Comprehensive Corporate Social Responsibility Health Programs: Providing Quality, Affordable and Accessible Healthcare for Financially-Challenged Patients (Private Tertiary Hospital Setting). 2017 International Awards, 53(1), 26.
- [4] Brandão, C., Rego, G., Duarte, I., & Nunes, R. (2013). Social responsibility: a new paradigm of hospital governance?. *Health Care Analysis*, 21, 390-402.
- [5] Buell, B., & Menard, C. (2016). Patient and family centred care in respiratory therapy: A fundamental right? *Canadian Journal of Respiratory Therapy: CJRT = Revue Canadienne de la Thérapie Respiratoire : RCTR*, 52, 50 - 50.
- [6] Cochran. P.L. (2007). „The evolution of Corporate Social Responsibility”, *Business Horizon*, Vol. 50, pp. 449-454
- [7] Flood, C., & Mansfield, N.J. (2018). Patient-Centred care.
- [8] Haddiya, I., Janfi, T., & Guedira, M. (2020). Application of the concepts of social responsibility, sustainability, and ethics to healthcare organizations. *Risk Management and Healthcare Policy*, 1029-1033.
- [9] Holman, D. (2002). Employee wellbeing in call centres. *Human Resource Management Journal*, 12(4), 35-50.
- [10] Hooks, R. (2016). Patient-centred care. *Nursing standard (Royal College of Nursing (Great Britain) : 1987)*, 30, 61-2 .

- [11] Kashyap, R., Mir, R., & Mir, A. (2004). Corporate Social Responsibility: A Call For Multidisciplinary Inquiry. *Journal of Business & Economics Research (JBER)*, 2(7). <https://doi.org/10.19030/jber.v2i7.2902>
- [12] Lamba, J., & Jain, E. (2022). The Emerging Need for Corporate Social Responsibility and Sustainable Investment in the Healthcare Sector during COVID 19. *International Journal on Recent Trends in Business and Tourism (IJRTBT)*, 6(3), 10-26.
- [13] Lubis, A. N. (2018). Corporate social responsibility in health sector: a case study in the government hospitals in Medan, Indonesia. *Verslas: teorija ir praktika*, 19(1), 25-36.
- [14] Ma, C., & Latif, Y. (2022). How to improve employee psychological well-being? CSR as a sustainable way. *Sustainability*, 14(21), 13920.
- [15] Radzi, N. A. M., Hasbollah, H. R., Normaizatul Akma, S., Hashim, H., & Ali, A. F. M. (2020). Wellness, Work and Employee Assistance Programs as Part of CSR Initiatives Among the Corporate Companies. *Palarch's Journal Of Archaeology Of Egypt/Egyptology*.
- [16] Rohini, R., & Mahadevappa, B. (2010). Social responsibility of hospitals: an Indian context. *Social Responsibility Journal*, 6(2), 268-285.
- [17] Sharma, S. G. (2009). Corporate social responsibility in India: An overview. *Int'l Law.*, 43, 1515.
- [18] Singh, S. (2010). Philanthropy to corporate social responsibility: An Indian perspective. *Revista de Management Comparat Internațional*, 11(5), 990-1000.
- [19] Siniora, D. (2017). Corporate social responsibility in the health care sector.
- [20] Smith, A. D. (2010). Corporate social responsibility in the healthcare insurance industry: a cause-branding approach. *International journal of electronic healthcare*, 5(3), 284-302.
- [21] Trivedi, P., Narang, R., & Fellow, S. R. (2017). SUSTAINABLE HEALTHCARE PRACTICES : ROLE OF CSR. In *VSRD International Journal of Technical & Non-Technical Research*. www.vsrjournals.com
- [22] Turban. D.B. & Greening. D.W. (1997). "Corporate social performance and organizational attractiveness to prospective employees", *Academy of Management Journal*, Vol. 40, No. 3, pp. 658-672
- [23] Westbrook, K.W., Grant, C.C., Rafalski, E.M., & Babakus, E. (2015). Patient-family Centred Care. *Journal of Health Management*, 17, 304 - 315.