

PHYSICAL HEALTHCARE AND SPECIALCARE PRACTICING IN GYNAECOLOGY HOSPITAL : A STUDY WITH STRUCTURE EQUATIONAL MODEL(SEM)

1.DR.N.NIRMALA

Assistant professor &head
Erode Arts and Science college(autonomous)
Erode-9

2.Dr.S.Bhuvaneshwari

Assistant Professor in Commerce
Sri GVG Visalakshi college for women,
Udumalpet

Abstract

The gynecology unit has embraced advanced procedure over the last few years. For adopting advanced technology and well experience doctors its resulting is pregnant women spending time is reduced. The majority of surgical procedures are performed as day surgery but major surgery women spend one or more nights in hospitals. The gynecology unit also provides pediatric services for children. Now a days this discussion very useful to pregnant women

Keywords : Gynecology, pregnant women

1. INTRODUCTION

Hospital services occupied a predominant role in the Indian Scenario. In 2005 National Health Care Mission (NHCM) was launched towards addressing rural women health needs. In present era ,more number of hospitals are opening in Tamilnadu with high quality for the best treatment of pregnancy women, especially gynecology services doctors working in gynecology hospitals address the dynamic reproductive health issues of middle age through older age women.

2.Statement Of the Problem

The Indian hospitals in the study area, is galloping towards the good standards and hence it is very essential that the satisfaction level of the existing services utilized by the pregnancy women have to be analyzed with regard to the various facilities provided by the hospitals. This may help the hospitals to retain the customers and to get new reputed and care taken to get new cases.

The success or failure of any hospital is largely depends on the satisfaction met by the pregnant women on various services offered. Pregnant women satisfaction is a combination of psychological, physiological and other health care related factors that fulfill the need of pregnancy women. It is their feelings to attend for the same hospital for more number of times during prenatal and post natal period shows their acceptance of the services due to the image and goodwill of the hospital.

In recent times most couples are limiting the family to single or two children. Hence there is need to focus on primi - females. It is the right time to study the women's awareness and their expectations in the maternal care centres to make the delivery process at easy way.

3. OBJECTIVES OF THE STUDY

- To study women's awareness and expectations in the gynecologists and the maternal care centres in Erode district
- To analyze the SEM that influenced the pregnant women to utilize the maternal care centres,

4. Review of literature

Tesleem and Ifeoma (2012)¹, this study was assessed client satisfaction with Maternal, Newborn and Child Health (MNCH) services provided at the Mother and Child Hospital, in Ondo State, Nigeria. Data were collected among 321 respondents at selected clinics in the hospital. Proportionate sampling method was used to determine the total number of clients to be selected from each clinic. The study concluded that the overall satisfaction with services at the facility was 62.6%. The satisfaction level was higher among illiterate patients, who had no costs for transportation and those who had high expectation while coming to the hospital.

[Simbar Masoomeh](#), et al.,(2012)², in their study entitled on assessment of quality of prenatal care in shahid beheshti Medical Science University Health Centers, To assess the level of accessibility to the Maternal and Child Health (MCH) Services, to assess the providers support towards Maternal and Child Health (MCH) Services. To assess the Hospital Service Facilities towards Mothers and Children, the researcher adopted

¹ Babalola Tesleem K.a, Okafor Ifeoma P.(2012), Client satisfaction with maternal and child health care services at a public specialist hospital in a Nigerian Province ,

² [Simbar Masoomeh](#), [Nahidi Fatemeh*](#), [Akbarzadeh alireza](#) .,(2012)., assessment of quality of prenatal care in shahid beheshti Medical Science University Health Centers, scientific information data base journal, [july-august 2012 , volume 11 , number 4](#); page(s) 529 to 544.

expectation sampling technique in the selected area. This study showed that, the association between overall satisfactions and available services- related to the providers were not statistically significant, but 76.6% of the respondents were highly satisfied with the support of the providers. The result showed that, 57.8% respondents were highly satisfied with the facilities of the service centers and the result was statistically significant (p-value <0.05). Related to the service expectation, 50.0% of the respondents were highly satisfied, though they had poor expectation level. Result revealed that, 39% of the respondents were highly satisfied and 47% of the respondents were moderate satisfied with the maternal and child health care services of the Maternal and Child Health Training Institute .

Varghese and Rajagopal (2012)³, in their study entitled to “A study to evaluate the level of satisfaction perceived by postnatal mothers following nursing care in postnatal wards as expressed by themselves”. The researcher by employed simple random technique. The data were collected from one hundred and four postpartum women. The researcher concluded that: Postpartum is a time for physiological and psychological adjustment for both the mother and her baby so, the nursing care offered to them should be safe, positive and satisfying to the mother. Special attention should be focused on quality post-partum health examinations and advices related to both mothers and their relatives. Post partum women still required and needed guidance, more support and assistance with baby care and her personal care.

5. SAMPLING METHOD

Samples of 300 pregnant women were selected from Erode district, based on the stratified random sampling method. The geographical area of the Erode district covering various revenue blocks are chosen. The pregent women records maintained in the gynaecologists hospitals was referred and from the records, the respondents were chosen randomly. Further, the pregent women coming from neighboring districts were also covered, because the pregent women are referred by the primary doctors.

³ Jipi Varghese (Corresponding Author), K.Rajagopal(2012), A study to evaluate the level of satisfaction perceived by postnatal mothers following nursing care in postnatal wards as expressed by themselves: pilot study Journal of Biology, Agriculture and Healthcare www.iiste.org,ISSN 2224-3208 (Paper) ISSN 2225-093X (Online) ,Vol 2, No.6, 2012

6.SOURCES OF DATA COLLECTION

Primary Data

In order to fulfill the objectives set out, sample studies were undertaken using a structured Interview Schedule. The structured interview schedule was pre-tested and suitable modifications were carried out. Data were collected from the sample respondents utilizing maternal health care centres of varying nature with respect to their Age, Gender, Education, Occupation, Income, Locality of residence, etc.

Secondary Data

The primary data were supplemented with sufficient secondary source data. The secondary data pertaining to the study were gathered from textbooks, journals, magazines, research reports etc. from the well-equipped libraries of Bangalore, Chennai and Erode and as well as from various daily Websites. They were utilized to get the necessary and latest information required for the study.

7.STRUCTURAL EQUATION MODELING (SEM)

Structural Equation Modeling is a very general statistical modeling technique, which is widely used in the behavioral sciences. It can be viewed as a combination of factor analysis and regression or path analysis. The interest in SEM is often on theoretical constructs, which are represented by the latent factors. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The structural equation model implies a structure for the covariance's between the observed variables, which provides the alternative name covariance structure modeling. However, the model can be extended to include means of observed variables or factors in the model, which makes covariance structure modeling a less accurate name.

Research model and hypothesis formulation

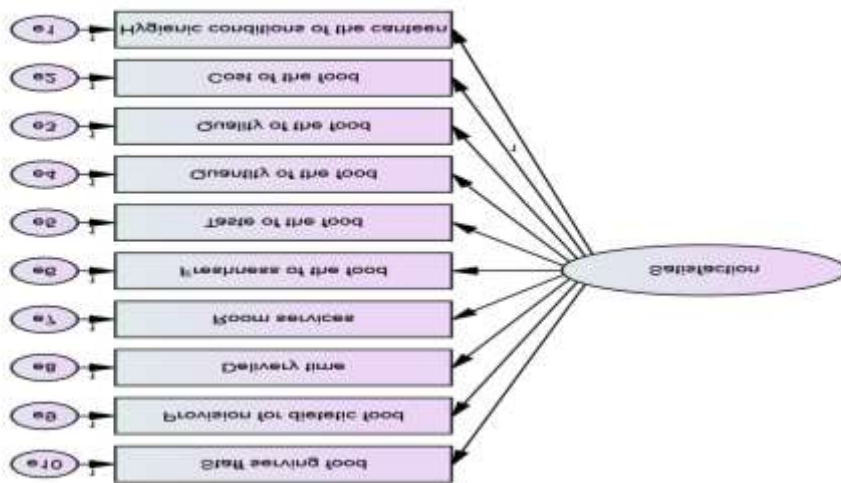
The research hypotheses have been defined on the basis of the constructs outlined as exogenous variables and latest variable by using path diagram. The following figure is a graphic presentation of the developed hypothetical model. On the basis of the manifesting variable and latest variable presented in the model, the following hypotheses are proposed.

Hypothesis of the study

There is a positive impact of selected independent variables of the respondents and perception on the services provided by the Gynecologists Hospitals.

FIGURE.4.30

HYPOTHESIS SUPPORTING RESEARCH MODEL



Validity of the Measurements

In structural equation modeling, the confirmatory factor model is imposed on the data. In this case, the purpose of structural equation modeling is twofold. First, it aims to obtain estimates of the parameters of the model, i.e. the factor loadings, the variances and covariance of the factor, and the residual error variances of the observed variables. The second purpose is to assess the fit of the model, i.e. to assess whether the model itself provides a good fit to the data.

The ability of SEM to produce a meaningful identification of the correlations between factors is a key strength.

In multiple regression analysis, it is generally assumed that the independent variables are correlated as the two-headed arrows between the predictor variables. The residual error in multiple regression analysis is actually an unobserved, latent variable. Note that to fix the loading of the residual error factor to one, to achieve identification.

To obtain unstandardized and standardized regression weights, a variance estimate for the residual errors and the squared multiple correlation of the dependent variable level of satisfaction perceived by the pregnant woman in Gynecologists Hospital services. In this case, the calculated value of Chi-Square test is 63.770 on 35 degrees of freedom, which gives a p-value of 0.002 and this model is a good fit for the analysis. The real strength of SEM is to estimate more complicated path models, with intervening variables between the independent and dependent variables, and latent factor as well.

Maximum Likelihood Estimates

TABLE. 1

REGRESSION WEIGHTS

S. No	Measured Variables		Latent Variable	Estimate	S.E.	C.R.	P
1	Staff servicing food	<---	Satisfaction	1.000			
2	Provision for dietetic food	<---	Satisfaction	.842	.070	12.050	***
3	Delivery time	<---	Satisfaction	.749	.071	10.534	***
4	Room services	<---	Satisfaction	.568	.064	8.879	***
5	Freshness of the food	<---	Satisfaction	.557	.068	8.174	***
6	Taste of the food	<---	Satisfaction	.712	.071	10.069	***
7	Quantity of the food	<---	Satisfaction	.641	.065	9.877	***
8	Quality of the food	<---	Satisfaction	.719	.065	11.124	***
9	Cost of the food	<---	Satisfaction	.579	.062	9.343	***
10	Hygienic condition of the canteen	<---	Satisfaction	-.042	.099	-.427	.669

(Source: primary data)

The above table shows the regression coefficient of the exogenous variables. It is noted that the critical ratio of Staff servicing food, Provision for dietetic food Delivery time, Room services, Freshness of the food, Taste of the food, Quantity of the food, Quality of the food , Cost of the food, and Hygienic condition of the canteen were covered in the select hospitals **are above the critical ratio 2.962 and it is significant at 1 percent level.** From the analysis, it is concluded that the selected variables such as Staff servicing food, Provision for dietetic food, Delivery time, Room services, Freshness of the food, Taste of the food, Quantity of the food, Quality of the food, Cost of the food, and Hygienic condition of the canteen are the most influencing factors. On the perception of issue covered on the performance appraisal in select hospitals.

CMIN

The following table shows that CMIN for the 'default model'. A significant Chi-Square indicates satisfactory model fit.

TABLE .2**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	20	63.770	35	.002	1.822
Saturated model	55	.000	0		
Independence model	10	907.151	45	.000	20.159

(Source: primary data)

CMIN is a Chi-Square statistics comparing the default model and the independence model with the saturated model. The above table infers that the default model has been associated as 1.822 percent with saturated model and other side, the independence model has been associated as 20.159 percent with saturated model.

RMR, GFI

The Root Mean Square residual is the mean absolute value of the covariance residuals, which reflect the difference between observed and model- estimated covariance. Specifically, RMR is the coefficient which results from taking the square root of the mean of the squared residuals. The closer is RMR is to 0, the better the model fit. The GFI is the goodness-of-fit index and is equal to $1 - (\text{Chi-Square for the default model} / \text{Chi-Square for the null model})$.

TABLE .3**RMR, GFI**

Model	RMR	GFI	AGFI	PGFI
Default model	.033	.958	.934	.610
Saturated model	.000	1.000		
Independence model	.276	.452	.331	.370

(Source: primary data)

From the above table it is indicated that the model is a good fit by the influence of RMR value is 033. GFI (Goodness of Fit Index) refers to 95.8 percent has been fitted in Default model for the proportion of variance-covariance matrix. On the other hand, 45.2 percent fit in Independence model.

Baseline Comparisons

The NFI, normed fit index, also known as (Δ_1), was developed as the alternative to CFI, comparative fit index, is also known as the Bentler Comparative Fit Index, compares the existing model fit with the null model which assumes the latent variables correlates with the independent variables.

TABLE. 4

BASELINE COMPARISONS

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.930	.910	.967	.957	.967
Saturated model	1.000		1.000		1.000

(Source: primary data)

From the above table, it is noted that the model fit indices are good fit with the evidence of NFI (0.930) and CFI (0.967) which is greater than 0.9.

RMSEA

Root Mean Square Error of Approximation is the popular measure of fit, because it does not require comparison with the null model. It is one of the fit indexes less affected by sample size. There is good model fit if RMSEA less than or equal to 0.05.

TABLE .5

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.052	.031	.073 .397	Default model
Independence model	.253	.239	.268 .000	Independence model

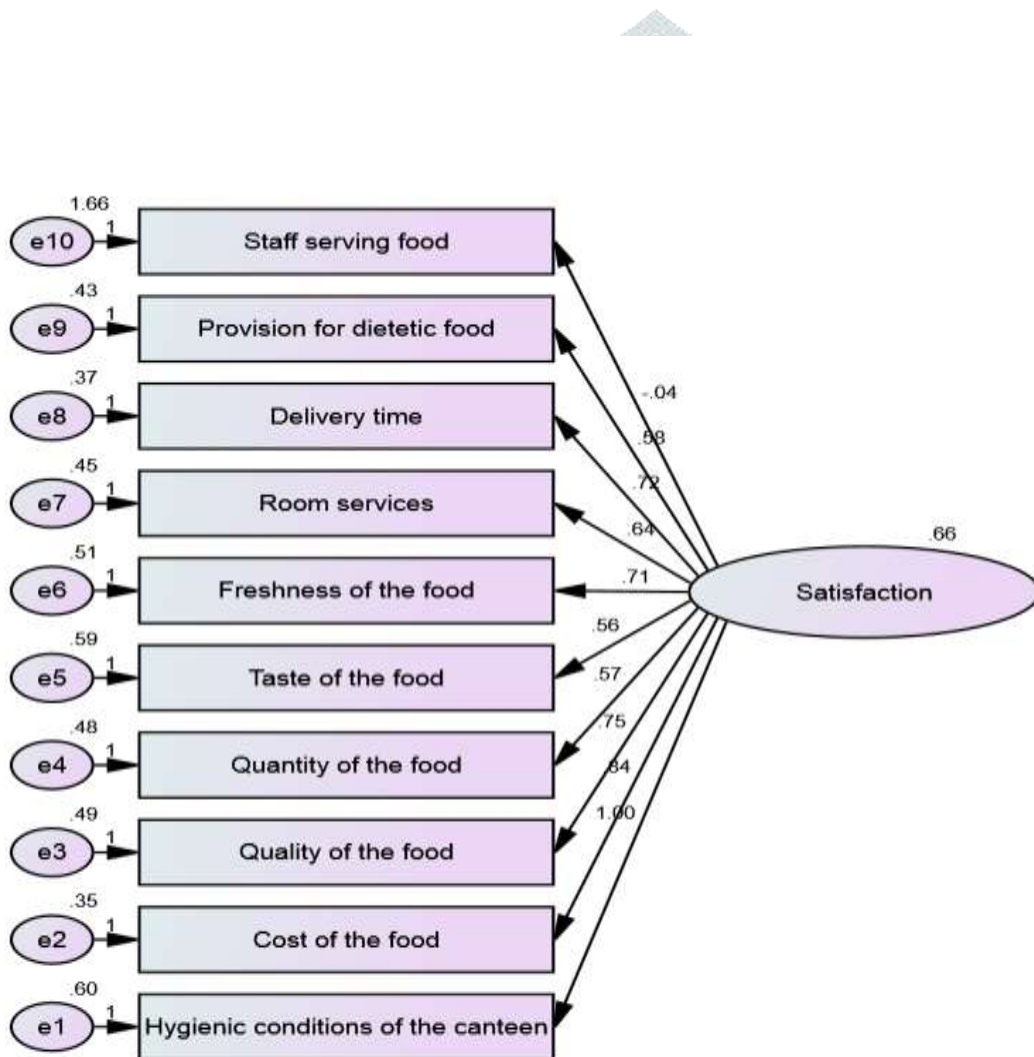
(Source: primary data)

It could be noted from the above table that the RMSEA value is 0.052 which is lesser than 0.07 and the model result is fit.

Structural Equations: Methodology and Technical Application

The following path analysis is used to prove the selected hypotheses.

HYPOTHESES MODEL



Testing of Hypotheses

The following table represents the results of the testing of the hypotheses.

TABLE. 6
TESTING OF HYPOTHESES

Hypotheses	Hypothetical Relationship	Result
H ₁ : There is a positive impact of Staff servicing food and their service performance in select Hospital	Positive	Confirmed
H ₂ : There is a positive impact of Provision for dietetic food on performance in select Hospital	Positive	Confirmed
H ₃ : There is a positive impact of Delivery Time and their service performance in select Hospital	Positive	Confirmed
H ₄ : There is a positive impact of Room services and their service performance in select Hospital.	Positive	Confirmed
H ₅ : There is a positive impact of Freshness of the food and their service performance in select Hospital	Positive	Confirmed
H ₆ : There is a positive impact of Taste of the food, and their service performance in select Hospital.	Positive	Confirmed
H ₇ : There is a positive impact of Quantity of the food and their service performance in select Hospital.	Positive	Confirmed
H ₈ : There is a positive impact of Quality of the food and their service performance in select Hospital	Positive	Confirmed
H ₉ : There is a positive impact of cost of food and their service performance in select Hospital.	Positive	Confirmed
H ₁₀ : There is a positive impact of Hygien condition and their service performance in select Hospital.	Positive	Confirmed

(Source: primary data)

8. Analysis and Result

From the path diagram, measured variables with latent variable it is learnt that all the selected manifesting variables are closely related to the latent variable having positive relationship and also significance at 1 percent level. The analysis of the model is, well fit as per the GFI value and the RMSEA value.

9. Finding of the study

SEM analysis reveals that the measured variables with latent variable of the perception on the services provided by the hospitals. It is having positive relationship and also significant at 1% percent level. The analysis of the model, from the viewpoint of the services covered in the performance hospitals, suggests that all the measured variables significantly influence the maternity women took treatment in the hospitals.

10. Suggestion and recommendation

1. The patients should lodge a complaint that the respondents of high income group and the wealthy persons are given special care by the doctors and the supportive staff in the private hospitals. This type of attitude should be wiped out and doctors should take a special care for all the patients without any discrimination.
2. The Gynaecology specialty hospitals are located in the interior places of the town/district and hence it is suggested that a good road map may be projected in the central bus stand, railway station and auto persons.
3. Complete information about the number of hospital and their special services along with specialist list is displayed in the internet web resources. This will help the patients to identify the doctors and hospitals for their treatment, which are located near to the houses.
4. The doctors, nurses and supporting staff should be provided a special training towards human relations and soft approaches with the pregnant women. The staff employed in the private hospital should be provided good salary on par with the government hospitals; this will create a happy environment and better approach to the customers

11.CONCLUSION

The Gynaecologist speciality Hospitals being a essential service to the human society, the hospital should provide a better service to the pregnant women with a better service quality. The services provided by the hospitals should accommodate the expectations of the patients. The satisfaction of the patients should be the mantra for the hospitals and they should focus towards achieving it.

At present more number of hospitals emerged with gynecologist specialist but hospital having reputations are charging at high fees was the poor are unable to take good treatment in these types of hospitals. Like foreign countries medical expenditure should may covered through medical insurance policies. Through this kind of Medi-claim policy, the pregnant women can take good treatment in corporate hospital with complete and good infrastructure facilities.

This creates a mental health and confidence, pregnant women to face the delivery related issues particularly the cost of operation charges and during delivery medicine related cost. This psychological well being indirectly gives confidence to womb women. The present study is rewarding exercise to the scholar and the researcher will be delighted, if the suggestions are incorporated by the policy maker in the hospitals and the government.

REFERENCE

- Corvino & Frank A, (2005) “Standard for Satisfaction Marketing Health Services, Summer”, vol.25 Issue 2, pp45-47.
- Ieter K.Tscheulin & Bernd Helmig, (1998) “The Optimal Design of Hospital Advertising by means of Conjoint Measurement”, Journal of Advertising research, May/June,vol.38.No.3,pp35-46.
- Johnson, Grace L., Ramaprasad & Arkalgud, (2000), “Patient- Physician Relationships in the Information Age Marketing Health Services”, Spring, vol.20 Issue, pp20-27.
- Joseph Sirgy M., David E. Hansen and James E. Littlefiel, (1994), “Does Hospital Satisfaction Affect Life Satisfaction”, Sage Publications, Journal of Micro Marketing. vol.14,No.2,pp36-46.

- Nimma Satynarayana, K Padma, G.Vijayakumar, (2004), "Patient Attitude Towards Payments at Super Specialty Hospital in Hyderabad", Journal of the Academy of Hospital Administration, vol.16,No.2, pp 112-19.
- Naidu G.M., Atul Parvatiyar, Jagdish N. Sheth and Lori Westgate, November (1999), "Does Relationship Marketing Pay An Empirical Investigation of Relationship Marketing Practices in Hospitals" Journal of Business Research, volume 46, Issue 3, pp 207-218.
- O'Malley & John, Winter (2004), "Hospital of One Marketing Health Services", vol.204 Issue 4, pp12-13.
- Rajshekhar G, Javalgi W, Benoy Joseph, William R.& Gombeski, (1995), "Positioning Your Service to Target Key Buying Influence the Case of Referring Physician and Hospitals", Journal of Services Marketing , vol 9 Issue:5, pp42-52.
- Sona bedi, Sanjay Arya, AK Sharma, (2006), "Patient Expectation Survey a Relevant Marketing Tool for Hospitals", Journal of Academy of Hospital Administration,vol.16,No.1.
- Syed Saad Andaleeb, (1994), "Hospital Advertising the Influence of Perceptual and Demographic Factors on Consumer Dispositions", Journal of Services Marketing, vol 8 Issue 1,pp48-59.
- Seltman & Kent, Summer (2003), "The Final Word on Patient Satisfaction", Marketing Health Services, vol.23 Issue 2.pp3.
- Thomas & Richard K., Summer (2002), "Building on First Impression", Marketing Health Services, Vol.22 Issue 2,pp34-38.
- Yezdi H. Godiwalla & Shirley, (2002), Y. Godiwalla, "Marketing Issues for the Hospital Industry", International Journal of Health Care Quality Assurance, vol 15 Issue 1, pp25-28.