

HEALTHCARE PRACTICING AND AWARENESS IN GYNAECOLOGY HOSPITAL:A STUDY WITH FACTOR ANALYSIS

DR.N.NIRMALA* & Dr.S.Bhuvaneshwari**

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

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

Received: August 25, 2018

Accepted: October 10, 2018

ABSTRACT

Mother is the most important position for women. Child bearing is one of the hazardous experiences that women engage in bringing new life to this world. Utilization of services in health care delivery system is different between rural and urban areas. The public sector urban health delivery system was established especially, for the rural poor with inadequate facilities but urban areas have a greater number of doctors per thousand populations as compared to rural areas (80% Doctors) with all adequate facility and do not face the transport bottleneck as compared to rural areas.

In present era, more number of hospitals is opening in Tamilnadu with high quality for the best treatment of Pregnancy women, especially Gynaecologist services. Doctors working in gynaecology hospitals address the dynamic reproductive health issues of middle age through older age women.

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: Gynecologist, pregnant women

INTRODUCTION

FACTOR ANALYSIS

Factor analysis is a method used to transform a set of variables into a small number of linear composite, which have maximum correlation with original variables. Factor analysis is used to study a complex products or services in order to identify the major characteristics or factors considered important by the respondents. The purpose of factor analysis is to determine the response to the several numbers of statements which are significantly correlated. If the responses to the several statements are sufficiently correlated, it is believed that the statements measure some factors common to all of them.

Factor analysis can only be applied to continue variables or intervals scaled variables. A factor analysis is like regression analysis as it tries to "Best Fit" factors to a scatter diagram of data in such a way those factors explains the variants associated with responses to each statement. Factor analysis was conducted by the researcher in the following stages.

1. Desk Research
2. Formulation of questionnaire
3. Collection of data
4. Feeding and processing the input
5. Analyzing the output
6. Identification of factors and naming them
7. Conclusion

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 That fulfills 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 the services due to the image and goodwill of the hospital.

OBJECTIVES OF THE STUDY

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

REVIEW OF LITERATURE

Renzi, et al., (2001)¹, in their study entitled "Factors associated with patient satisfaction with care among dermatological out patients" pinpointed that the patient satisfaction is an important indicator in evaluating the quality of the patient care in the outpatient department. In the context of total quality, serving the customers/patients does not simply mean satisfying them. It implies satisfying their needs in conformance to their requirements, and the specifications have to be stated explicitly by customers to be satisfied.

Khandaker, et al., (2001)² in their study entitled on "Comparison of Services of Public, Private and Foreign Hospitals from the Perspective of Bangladeshi Patients" The researcher was analyzed an overview of the perspectives of Bangladeshi patients on the quality of service in private, public and foreign Hospitals. The study found out the quality of service in private hospitals scored was higher than the public hospitals for nursing care, tangible hospital matters, i.e. cleanliness, supply of utilities, and availability of drugs. But overall quality of service was better in the foreign hospitals as compared to private hospitals in Bangladesh.

FACTORS CHOSEN FOR THE ANALYSIS

The level of satisfaction perceived by the respondents (pregnancy women's) in utilizing the Gynaecologists Hospitals in the study area was studied by the selecting six major factors. Each factor consist of four or five statements, comprising totally 13 statements the main factors are designation diagnosing and nursing facilities, five point scaling technique was employed to arrive at opinion of dealers on each statement. 13 statements were chosen and classified under six factors. Factor analysis and the detailed analysis and discussion is done at various stages.

STATISTICS ASSOCIATED WITH FACTORS ANALYSIS

Bartlett's test of sphericity can be used to test the null hypothesis to conclude that the variables are not correlated with the population. The test of sphericity is based on the Chi-Square transformation of the determinant of the correlation matrix. A large value of test of statistics will favor the rejection of null hypothesis.

KAISER-MAYER-OLKIN-MEASURE OF SAMPLING ADEQUACY

This index compares the magnitude of the observed correlation coefficient to the magnitude of partial correlation co-efficient. Instances of small values indicate that the correlation between PARIS of variable cannot be explained by other variable and hence, factor analysis will not be appropriate.

EIGEN-VALUES AND COMMUNALITIES

A factor's Eigen value or latent route is the sum of the squares of its factor loading. It helps us explain how well a given factor fits the data from all respondents on the statements. Communalities is the sum of squares of a statements factor loading, i.e. it explains how much each variable is accounted for by the factors taken together.

FACTOR LOADING

Simple correlation between the variables and the factors were studied with the help of Factor matrix contains the factor loading and the factors. The researcher has applied the factor analysis to assess the major attributes influencing to the level of satisfaction among the pregnancy women's.

A correlation matrix constructed based on the ratings. The analytical process is based on the matrix of correlation between variables. Valuable insights can be gained from a examination of this matrix. If the factor analysis be proper the variables must be correlated. If the correlation between all the variables are small, factor analysis may not be appropriated. In this inter correlation matrix the correlation between all the variables are in good fit, and the factor analysis may be appropriate.

¹Renzi C, Abeni D, Picardi A, et al. 2001 ,Factors associated with patient satisfaction with care among dermatological out patients. Br J Dermatol. Oct;145(4)

² Khandaker, SA., Siddiqui, N. 2001, Comparison of Services of Public, Private and Foreign Hospitals from the Perspective of Bangladeshi Patients. www.ncbi.nlm.nih.gov. Retrieved: November 28,2007

**TABLE NO.1
INTER CORRELATION MATRIX**

1.000	.186	.135	.169	.300	.364	.204	.229	.161	.105	.210	.042	.243
.186	1.000	.276	.220	.339	.345	.235	.383	.265	.092	.116	.202	.145
.135	.276	1.000	.208	.320	.225	.290	.212	.211	.126	.126	.203	.163
.169	.220	.208	1.000	.285	.353	.209	.329	.293	.258	.043	.162	.165
.300	.339	.320	.285	1.000	.396	.377	.382	.228	.242	.151	.050	.163
.364	.345	.225	.353	.396	1.000	.364	.358	.344	.245	.107	.110	.277
.204	.235	.290	.209	.377	.364	1.000	.318	.310	.297	.160	.185	.138
.229	.383	.212	.329	.382	.358	.318	1.000	.254	.185	.113	.154	.228
.161	.265	.211	.293	.228	.344	.310	.254	1.000	.393	.126	.159	.121
.105	.092	.126	.258	.242	.245	.297	.185	.393	1.000	.061	.130	.133
.210	.116	.126	.043	.151	.107	.160	.113	.126	.061	1.000	.379	.221
.042	.202	.203	.162	.050	.110	.185	.154	.159	.130	.379	1.000	.254
.243	.145	.163	.165	.163	.277	.138	.228	.121	.133	.221	.254	1.000

(Source: primary data)

**TABLE.NO.2
KMO AND BARTLETT'S TEST**

Kaiser-Mayer-Olkin Measures of Sampling adequacy	.827
Bartlett's test sphericity approx chi-square	716.489
DF	78
Sig.	.000

(Source: primary data)

The above table of Bartlett's test to sphericity and Kaiser Mayer Olkin measures of sampling adequacy are used to test the appropriateness of the factor model. Bartlett's test is used to test the null hypothesis that is to find out that the variables are not correlated. Since the approximate Chi-Square value on pregnancy women's satisfaction is 716.489 which is significant at 1% level, the test leads to rejection of null hypothesis. The value KMO statistics is also high (0.827) thus the factor analysis is considering an appropriate technique for analyzing the correlation, matrix

**TABLE NO 3
COMMUNALITIES**

	Initial	Extraction
Hospital staff are providing adequate information at the time registration	1.000	.460
Waiting time in registration is very rare	1.000	.369
Formalities in registration are simple	1.000	.255
Approach of the receptionist is good	1.000	.362
Adequate time is taken for consultation	1.000	.523

Answering the queries promptly	1.000	.537
Counseling by the doctors are excellent	1.000	.405
Explanation given for ailment	1.000	.442
Approach of the doctors are good	1.000	.554
Approach of the nurses and fair Services are good	1.000	.611
Special care of Assistance by the Nurses at the time emergency	1.000	.609
Timely Medication given by the staff nurses	1.000	.691
Availability of the nurses	1.000	.380
Extraction Method: Principal Component Analysis.		

(Source: primary data)

TABLE NO.4
TOTAL VARIANCE EXPANDED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.748	28.830	28.830	3.748	28.830	28.830	2.635	20.269	20.269
2	1.334	10.262	39.092	1.334	10.262	39.092	1.951	15.007	35.276
3	1.117	8.590	47.682	1.117	8.590	47.682	1.613	12.406	47.682
4	.999	7.681	55.363						
5	.892	6.858	62.221						
6	.790	6.078	68.299						
7	.719	5.527	73.826						
8	.713	5.483	79.309						
9	.631	4.853	84.162						
10	.572	4.403	88.565						
11	.559	4.301	92.866						
12	.473	3.635	96.501						
13	.455	3.499	100.000						

(Source: primary data)

Extraction Method: Principal Component Analysis.

It is observed that the labeled Eigen values used highlights that the Eigen value for a factor indicates total variance attributed to the factor. Factor one, accounts for variance 3.748 which is 28.830% of the total variance; likewise the second factor attending at waiting time in registration accounts for variance 1.334 which is 10.262 and the first three factors combine to account for 47.682% of total variance similarly fourth factor Approach of the receptionist shows 0.99 variance the fifth factor is represented with 0.892 variance. Sixth factor Approach of the Answering the queries promptly is shows 0.790 variance the Seventh factor is counseling by the doctors are excellent represented with 0.719 variance. Eighth factor is Explanation given for ailment shows 0.713 variance the Ninth factor is Approach of the doctors are good represented with 0.631 variance. Tenth factor is Approach of the nurses and fair Services are good shows 0.572 variance the eleventh factor is Special care of Assistance by the Nurses at the time emergency is represented with 0.559 variance. The Twelfth factor is Timely Medication given by the staff nurses is showed the variance of 0.691. The thirteenth factor is Availability of the nurses is showed the variance of 0.455 the total value of 96.501 percent represents the combination of these entire factor.

DETERMINATION OF FACTORS EIGEN VALUE

In this approach, only the factors with Eigen values greater than 1.0 are maintained (Hospital staff are providing adequate information at it time registration, Waiting time in registration is very rare and Formalities in registration are simple) the other factors are not included in the model. Since there are three components possessing Eigen values which are greater than 1.30. That is three factors are said to be extracted from the total of thirteen factors.

RESULT AND DISCUSSION

The extent of utilizing Gynaecologists Hospitals by the respondents in the study area was studied by selecting 300 sample respondents chosen randomly from resource parts of the study. The level of satisfaction perceived on service rendered in the Gynaecologists Hospitals was considered as the dependent variable. The independent variables selected for the study were Age, Educational qualification occupation, monthly income, Area of living, family size, and wealth position. All other factors were statistically significant and proved that there was a close relationship between the selected independent variables and the dependent variable i.e., level of satisfaction perceived on services of Gynaecologists Hospitals.

9. Finding of the study

1. Factor analysis reveals that the extent of utilizing Gynaecology Speciality Hospitals by the respondents in the study area was studied by selecting thirteen statements. Among these thirteen variables, it is condensed to three statements viz. hospitals staff are providing adequate information at time of registration during pregnancy period approaches of the Doctors and special assistance given by the nurses, which are highly influencing factors on services rendered in the hospital.

10. Suggestion and recommendation

1. The study reveals that majority of the respondents are not aware about the various medical facilities (speculum, Advanced equipment's etc) in Gynaecology speciality Hospitals. Hence, it is suggested that a good awareness must be created by the hospitals.
2. The patients highlighted their expectations towards physical care services and it is pinpointed that diet and nutrition care was given 1st priority by the respondent's. Hence, the hospital centers should take more care in providing a separate calm place for meditation and yoga.
3. While coming to the hospitals the respondents brings a nominal amount for their treatment. Suddenly, the cost of treatment or the other operational expenditures escalate the bill amount and they find difficult to settle the bills immediately. Hence, it is suggested that every hospital should have a separate ATM centers along with other augmented service like restaurant/canteen, facilities with neat and tidy within the hospital campus.
4. The patients should lodged 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.

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.

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