

**THE QUALITY AND EFFICIENCY OF HEALTH CARE AND PATIENT'S
SATISFACTION LEVEL: A COMPARATIVE STUDY OF GOVERNMENT
AND PRIVATE MATERNAL AND CHILD HEALTH CARE CENTRES
(MCHCS) OF KARACHI**

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Abstract

This study is about the problems of maternal and child health with the comparison of government and private health care sector in Karachi city. This study encompasses various problems and difficulties that patients usually face during treatment. The most important intention of the researchers is to find out various factors related with and responsible for the level of patients satisfaction in maternal and child health care centers. Satisfaction can be measured indirectly by asking patients to rate the quality of services that are provided by government and private health sector and are being received by patients. Target population of this study was the admitted patient's in maternal and child health care centers in Karachi city. Researchers used simple random sampling in this study. They selected Gulshan-e-Iqbal and Saddar Town. The sample of this study consisted of 150 respondents. The data were collected through the help of interview schedule. For the analysis of the study univariate tables and chi-square tests were used. In the first part, the paper comprises of introduction of patients' level of satisfaction and its determinants. In the 2nd part, it consists of hypotheses and key concepts of the study. The 3rd part comprises of methodology and statistical analysis of the hypotheses. The last section highlights the conclusion and recommendation for the improvement of maternal and child health care centers and services comparatively in both government and private maternal and child health care centers (MCHC).

Keywords: government & private health care, level of patients satisfaction, maternal & child health care, quality of services

Introduction

In any health care system, good health services are those which deliver effective, safe, good quality, personal and non-personal care to those who need it. While many questions remain about how to improve the organization and management of health service delivery so as to achieve better and more equitable coverage and quality of health services. Health services are the most visible part of any health care system both to users and the general public. Health services like promotion of health, prevention from diseases, treatment or rehabilitation after illness occurrence. Effective health

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service delivery depends on having some key resources: motivated staff, advance equipment, information and finance, and adequate drugs. Improving access, coverage and quality of health services also depends on the ways that services are organized and managed and on the incentives influencing providers and users.

Focus of the Study

The most important intention of the researchers is to find out various factors of the related to and responsible for the level of patient's satisfaction of maternal and child health care centres of government and private sector in Pakistan, particularly in Karachi city. In many instances when investigators claim to measure satisfaction more general evaluation of health care services are being under taken. Satisfaction can be measured indirectly by asking to rate the quality of services, which are being received by patients. The title of the study is very much clear for the social and health problems, it meant that the health services, treatment, environment of the hospital, economical factor of patient are responsible to the level of satisfaction and those could be termed as determinant factors of patient's satisfaction.

Patient's Satisfaction and its Determinants

Patient's satisfaction can be measured by different determinants and high quality of care as perceived by patient's judgment that is multidimensional and sometimes indescribable. Another view of level of satisfaction means that *"The perception of the patient(s) of one or more aspects of a dental/health care system; an outcome measure of quality"*¹. It generally viewed that Perception of patient's regarding different aspects of health care system, measure of quality of treatment. By the definition from grounded theory of patient's level of satisfaction " In Greek language, satisfaction is a composite word and is derived from the word (ikano) that means (arrive) then patients satisfaction could be interpreted as " make a patient to evaluate his own care based on his quality of care that receives from hospital" in other definition it refers to *"The degree to which individual regards the health care services or the manner in which it is delivered by the provider as useful, effective or beneficial"* satisfaction depends on quality of care that means *"characteristics of a services that distinguish it from others similar services. So it is easier to describe quality dimensions than to define quality"*². It also defines by all these care dimensions that assure a good health or a recovery from the illness. Patient's satisfaction needs to find the phases from which the patient passes, to evaluate the care that he receives before his admission to the hospital and after his discharge from the hospital.

Determinants of Patient's Satisfaction

- Health care delivery services
- Behaviour of the staff
- Communication of patients with nursing staff

¹ <http://medical-dictionary.thefreedictionary.com/patient%20satisfactionit>

² V. Raftopolous, (2005) "a grounded theory for patients satisfaction with quality of hospital care": issue addition 22, ICUS nursing journal, Hellenic centre for infectious diseases control. then ,Greece p.7

- Hygienic condition of the maternal health care centre
- Patients- doctor relationship
- Medical care
- Expenses of treatment

State of Maternal and Child Health in Karachi

Current situation of maternal and child health care in Karachi is in alarming situation. Almost all reports and researches are indicating that situation is getting worst day by day. Karachi is the capital of province of Sindh and it is the hub of economy of Pakistan. Being a capital of Sindh the overall health indicators of Sindh reflects on Karachi's situation as it reported that "about 314 mothers out of 100,000 live births die during pregnancy, child birth or soon after; with devastating effects on families and livelihoods."³

Karachi has the largest numbers of health facilities centres in all 5 divisions of Sindh. "There are 275 government health care institutions or centres are working in Karachi in the shape of hospitals, maternity homes, maternal and child health centres, dispensaries and basic health units (BHUs)."⁴

Majority of small basic health units, dispensaries, maternal and child care centres (MCHCs) are dysfunctional, their infrastructure doesn't exist anywhere. Some of the buildings of dispensaries are been occupied by land grabbers and criminals in slum area and in suburbs.

Type of Government Health Facilities in Karachi

Major hospitals	Maternal and child health care centres (MCHCs)	Dispensaries	Basic health units (BHUs)	Maternity homes	Others	Total
3	16	79	27	35	115	275

Source: (Sindh health sector report 2012:p26).

According to the above table there are 3 major hospitals are running in Karachi for about 160 million population of sprawling Karachi which are supposed to cater the needs of the low income segment of society, however most of the time it is reported that doctors are not available in the maternal and child health care centres (MCHCs) in the second half of the day and in late night.⁵ There is report that 70 percent of the children across the globe born during the night between 2:00 am to 6:00 am, therefore all maternal and child health care centres should be open and work around the clock.

³ Health facility assessment Sindh government provincial report on health facility. June 2012 by TURF page no.12) http://www.trfpakistan.org/LinkClick.aspx?fileticket=d_XC3Zmun0c%3D&tabid=2404

⁴ Sindh health sector strategy report 2012-2020, annexure: p26 Government of Sindh, Karachi. <http://115.186.137.115/reports/hfa/provincial/Provincial-Report-Sindh.pdf>

⁵ Sindh health sector strategy report 2012-2020, annexure: p26 Government of Sindh, Karachi

But unfortunately in Karachi if a pregnant lady arrives at the hospital after 1, o clock in night, the delivery conducted by an “aye” and by sweepers, sometimes 2:00 pm in after noon it happens as well, this is happening in the Karachi. It must be noted that maternal and child health care centres are not running by doctors alone but they need midwives, paramedic, aya, sweepers and security staff besides having basic facilities such as water and electricity. The dilemma of health care centres of Pakistan is the lack of administrative will to deliver quality health to population. In past it also shown that situation was more worse than today in “2007-08 statistics indicate that one women dies every minute in Pakistan due to post natal infection, life time risk of maternal death for women in Pakistanis 1 in 31 while roughly 1 out of 10 children born in Pakistan die before the age of five, among the factors contributing to maternal death and infant mortality are high fertility, inadequate access to quality maternal and child health care services, a low rate of skilled birth attendance, inadequate emergency obstetric and new born case, low female literacy , poverty and socio-cultural causes of maternal death as well.⁶

Health care services and government health sector spending in Pakistan

Health plays the key role in determining the human capital. Better health improves the efficiency and the productivity of the labour force, ultimately contributes the economic growth and leads to human development and welfare.

To attain better, more skillful, efficient and productive human capital resources, governments subsidize the health care facilities for its people. In this regard, the public sector pays whole or some part of the cost of utilizing health care services. The size and distribution of these in-kind transfers to health sector differs from country to country but the fundamental question is how much these expenditures are productive and effective? It very much depends on the volume and the distribution of these expenditures among the people of different areas of the country. Besides the nature of the existing circumstances of the human resource, any marginal change in public sector spending on health services may have positive impact on the human capital and economic growth. Health generates positive externalities for the society as a whole, as well as the equity concerns that without public sector financial support only the wealthy segment of the population would be able to afford reasonable health care services. Lamiraud, *et al.* (2005) argued that social health protection is an important instrument aiming at fair burden sharing and reducing barrier underlining access to health care services. Another good reason for the government spending in delivering basic health care services is to reduce burden of the diseases (BOD) in the productive years of the life. The social rate of return and the BOD force the policy-makers to transfer the public resources towards basic health care facilities. According to the Economic Survey of Pakistan (2005-06), the government spent 0.75 percent of GDP on health sector in order to make its population more healthy and sturdy. In this regard, a number of vertical and horizontal programmes regarding health facilities are operative in Pakistan. The federally funded vertical programmes include: Lady Health Worker Programme; Malaria Control programme; Tuberculosis and HIV/AIDS Control.

⁶ Daily dawn 20 Aug 2007)

Programme; National Maternal and Child Health Programme; the Expanded Programme on Immunization; Cancer Treatment Programme; Food and Nutrition Programme, and; the Prime Minister Programme for Preventive and Control of Hepatitis A & B. To effectively address the health problems facing Pakistan, a number of policies emphasize better health care services. These include: Health related Millennium Development Goals; Medium Term Development Framework; Two Poverty Reduction Strategy Papers; National Health Policy, and; Vision 2030. In spite of these policies, to overcome the health related a problem in Pakistan seems suspicious and distrustful. The communicable diseases are still a challenge and the statistics reveal that the nutrition and reproductive health problem in communicable diseases are still liable for the 58 percent of the BOD in Pakistan. Non-communicable diseases (NCD), caused by sedentary life styles, environmental pollution, unhealthy dietary habits, smoking etc. account for almost 10 percent of the BOD in Pakistan. Social Policy Development Centre (SPDC), 2004, demonstrates that out of every 1,000 children who survive infancy, 123 die before reaching the age of five. A large proportion of those who surviving suffers from malnutrition, leading to impaired immunity and higher vulnerability to infections.

Malnutrition is big problem in Pakistan. Human Conditions Report (2003) clearly points out that about 40 percent children under 5 year of age are suffering from malnutrition. About 50 percent of deaths of children under 5 years old children are due to malnutrition.⁷

Maternal and Child Health Status in Pakistan

Pakistan's maternal and child health condition is extremely poor in south Asia. The efforts to improve maternal and child health are also underway but still Pakistan is way behind the developing countries. Constitutionally health is provincial subject in Pakistan, the provincial governments are responsible for the delivery and the management of maternal and child health services and rest of all health care services. At expected over 188 million people are living in Pakistan as the 6th most populous country of the world with current growth rate at 2.0 percent per annum. With respect to infectious disease data from the Pakistan demographic survey, non-communicable diseases and injuries are amongst the top ten causes of mortality and morbidity in Pakistan.⁸

Maternal health status in Pakistan

Life expectancy	Infant mortality Per 1000	Mortality rate under 5 per 1000	Population Avg. Annual % Growth
65.7	59	72	2.03

Source: (Economic survey of Pakistan 2012-13 p.146)

⁷ Muhammad Akram (2007), International Institute of Islamic Economics, International Islamic University, Islamabad, publication PIDE Working Papers Pakistan.

⁸ Health and nutrition p.146 ,Economic survey of Pakistan 2012-13,ministry of finance government of Pakistan

Health Expenditure by Government

The utility of funds and expenditure on health sector is not sufficient. In administrative structure the control of government on expenses is weak. Major part of the budget of health sector is never been used by bureaucracy and administration about 20 percent of the amount have been lapse by incompetency of administration.

Fiscal year 2012-13 has witnessed as impressive increase in health sector allocation rising from Rs. 62.billion to 79.46 billion (0.35) of the GDP. But the main problem is still lays in implementation.⁹

Health Expenditure Utilization by Government in last five years

Health & Nutrition Expenditures (2008 to 2012) (Rs. Billion)					Health expenditures as % of GDP
Fiscal years	Public sector Expenditure (federal and provincial)			Percentage change	
	Total health expenditures	Development expenditure	Current expenditure		
2010-11	42.00	19.00	23.00	- 47	0.23
2011-12	55.00	26.25	28.00	30.97	0.27
2012-13	79.46	17.34	62.12	44.16	0.35

Source: (Economic survey of Pakistan 2012-13)

Health Services Delivery by Government and Private Sector in Pakistan

Services delivery is being organized through preventive, curative and rehabilitation services. The curative and rehabilitative services are being provided mainly at the secondary and tertiary care facilities preventive services on the other hand are mainly provided through various national programmes and community health works, interfacing with the communities through primary health care facilities and outreach activities. Pakistan has one of the largest public sectors owned services delivery infrastructure in the world.

“The health sector in Pakistan suggests that the number of doctors has increased to more than 1, 60289, Dentists 12544, nurses 82119 and lady health visitors (LHV). The current ratio of population density versus health facilities is at 1127 person against one doctor, 14406 per dentists and availability of one hospital bed for 1786 person compares well with some regional countries like Bangladesh and India. Pakistan has also a large market for private health care delivery. The private sector provides varying levels of care and constitutes a diverse group of doctors, nurses etc. most of the facilities have been established in urban areas. Despite a substantial growth in the number of health

⁹ Health and nutrition p.146 ,Economic survey of Pakistan 2012-13,ministry of finance government of Pakistan

institutions, facilities and services, the desired health outcomes could not be achieved due to rapid growth of population”.¹⁰

Physical target and achievements of government in health sector

Physical targets and achievements during 2012-13			
Sub sector	Targets numbers	Estimated Achievements (numbers)	Achievements (%)
New Basic health unit (BHUs)	40	32	80
New rural health centres (RHCS)	10	07	70
Health manpower			
Doctors	5000	4400	88
Dentists	500	430	86
Nurses	4000	3300	73
Paramedics	5500	4500	82
Training of LHWs	10000	8000	80

Source: (Economic survey of Pakistan 2012-13 p.148)¹¹

Influencing Provision and Factors of Reproductive Health Services

Like most developing countries included Pakistan the delivery of reproductive health services are influenced by various factors that are given below.

- Number of services delivery points
- Geographical, physical and social accessibility.
- Proper visibility and advertisement of services
- The quality of care or provided within services delivery outlets.
- Quality of care
- Opening and closing times
- General cleanliness or hygiene.
- Proper waiting area.
- Availability of trained and proper staff.
- Availability of range of services including medicine and equipment.^{12 & 13}

¹⁰ Health and nutrition p.146, Economic survey of Pakistan 2012-13, ministry of finance government of Pakistan, Islamabad. Pakistan

¹¹ Ibid., p.148

Objectives

- To find out patient's level of satisfaction regarding health care services between governmental and private maternal and child health care centres (MCHCs) in Karachi city.
- To analyse the difference in health care services between governmental maternal and child health care centres (MCHCs) and private maternal and child health care centres (MCHCs) in Karachi city.

Hypotheses

- There is a significant relationship between the types of health care centre and behaviour of staff.
- There is significant relationship between the behaviour of staff and the patient's level of satisfaction.
- There is significant relationship between the type of health care centre and the communication with nursing staff
- There is significant relationship between the communication with nursing staff and the patient's level of satisfaction
- There is significant relationship between type of health care centre and the hygienic condition
- There is significant relationship between the hygienic condition and the patient's level of satisfaction
- There is significant relationship between the type of the health care centre and the health care services
- There is significant relationship between the health care services and the patient's level of satisfaction
- There is significant relationship between the medical care and the patient's level of satisfaction.
- There is significant relationship between type of health care centre and expenses of treatment
- There is significant relationship between type of health care centre and patient's level of satisfaction

¹² Health and nutrition p.148, Economic survey of Pakistan 2012-13, ministry of finance government of Pakistan, Islamabad. Pakistan

¹³ M. Aslam, Choudhary, Ali Mohammad Mir (2004), "An Introduction to Medical Demography and Population Studies", by Iftikhar book company, Rawalpindi, Pakistan p.224

Definition of the key concepts

- **Patient's level of satisfaction:** The degree to which individual regards the health care services or the manner in which it is delivered by the provider as useful, effective or beneficial.
- **Type of the centre:** This refers to the type of maternal and child health care centre whether it is government or private.
- **Behaviour of the staff:** It refers to the way in which staff acts or conducts patients by ethical, attitude consideration.
- **Communication with nursing staff:** It refers the exchange of thoughts, messages, and sharing information, between patients and nurses.
- **Hygienic condition of the centre:** This refers to the Conditions and that serves to promote or preserve health, and prevent disease by the sanitation condition.
- **Health care services:** This refers to the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions.
- **Medical care:** This refers to Application of remedies to a patient or for a disease or injury; medicinal or surgical management.
- **Expenses of treatment:** Any cost of treatment van is called as expenses of treatment that are paid by patient.

Research Methodology

The nature of present study is based on quantitative methodology. The present study is exploratory because of the nature of the problem. In the present study the researchers have chosen two towns by simple random sampling out of 18 towns of Karachi through random numbers. Saddar town and Gulshan-e-Iqbal town were selected in the second step again random numbers were used to select government and private maternal and child health care centres (MCHC). The list was obtained from ministry of health. Two from government and two private maternal and child health care centres from each town were selected but due to the refusal from one private and governmental hospital, sample remained on one government and private maternal and child health care centres (MCHC). Researchers collect data from those mothers who were admitted in hospital for post and pre delivery of a child or any maternal health problem. equal proportionate stratified sampling were used by the researchers to collect the data from the admitted mothers researchers collect data from 150 respondents as a sample size 75 respondents from each centre that were government Civil hospital Karachi and from private Liaquat National Hospital Karachi. Interview schedule was used as a data instrument.

Contingency Tables and Testing of Hypotheses

Hypothesis 1

Ho = There is no relationship between the type of health care centre and the behaviour of the Staff

H1 = There is a relationship between the type of health care centre and the behaviour of staff

Behaviour of the staff	Type of the health care centre		Total
	Government	Private	
Friendly/politely	48(51)	54(51)	102
Indifferently/rudely	27(21)	21(24)	48
Total	75	75	150

Calculated value of chi-square = 0.472

Table value of chi-square = 3.841

As the calculated value of chi-square is lesser than its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is accepted and alternate hypothesis is rejected, thus it is concluded that the type of health care centre and the behaviour of the staff has no relationship. It means that the Behaviour of the staff with patients is friendly and polite whether the centre is government or private.

Hypothesis 2

Ho = There is no relationship between the behaviour of staff and the patient's level of satisfaction

H1 = there is a relationship between the type of health care centre and the behaviour of staff

Level of satisfaction	Behaviour of the staff		Total
	Friendly	Not friendly	
High	78(64.6)	17(30.4)	95
Low	24(37.4)	31(17.6)	55
Total	102	48	150

Calculated value of chi-square = 23.688

Table value of chi-square = 3.841

Coefficient of correlation = 0.369

As the calculated value of chi-square is higher than its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the type of health care centre and the behaviour of the staff has moderate relationship.

Hypothesis 3

Ho = There is no relationship between the type of health care centre and the communication with nursing staff

H1 = There is relationship between the type of health care centre and the communication with nursing staff

Good Communication with nursing staff	Type of health care centre		Total
	Government	Private	
Agree	59(38.5)	18(38.5)	77
Disagree	16(36.5)	57(36.5)	73
Total	75	75	150

Calculated value of chi-square = 44.856
Table value of chi-square = 3.841
Coefficient of correlation = 0.479

As the calculated value of chi-square is higher than its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the type of health care centre and the communication with nursing staff has moderate relationship.

Hypothesis 4

Ho = There is no relationship between the communication with nursing staff and the patient's level of satisfaction

H1 = There is relationship between the communication with nursing staff and the patient's level of satisfaction

Level of satisfaction	Good Communication with nursing staff		Total
	Good	Poor	
High	87(88.93)	28(26.06)	115
Low	29(27.06)	6(7.93)	35
Total	116	34	150

Calculated value of chi-square = 0.793

Table value of chi-square = 3.841

As the calculated value of chi-square is lower than its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is accepted and alternate hypothesis is rejected, thus it is concluded that the type of health care centre and the communication with nursing staff has no relationship.

Hypothesis 5

Ho = There is no relationship between the type of health care centre and the hygienic condition.

H1 = There is relationship between the type of health care centre and the hygienic condition.

Hygienic condition	Type of the health care centre		Total
	Government	Private	
Good	45(57.5)	66(57.5)	115
Bad	30(17.5)	9(17.5)	35
Total	75	75	150

Calculated value of chi-square = 17.029

Table value of chi-square = 3.841

Coefficient of correlation = 0.319

As the calculated value of chi-square is higher than its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the type of health care centre and the hygienic condition of the centre has weak relationship.

Hypothesis 6

Ho = There is no Relationship between the hygienic condition and the patient's level of satisfaction.

H1 = There is Relationship between the hygienic condition and the patient's level of satisfaction.

Level of satisfaction	Hygienic condition		Total
	Good	Bad	
High	95(74)	16(37)	111
Low	5(26)	34(13)	39
Total	100	50	150

Calculated value of chi-square = 68.761

Table value of chi-square = 3.841

Coefficient of correlation = 0.560

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the hygienic condition of the centre and patient's level of satisfaction has moderate relationship.

Hypothesis 7

Ho = There is no Relationship between the type of the health care centre and the health care services

H1 = There is Relationship between the type of the health care centre and the health care services

Health care services	Type of health care centre		Total
	Government	Private	
Good	70(65.5)	61(65.5)	131
Bad	5(9.5)	14(9.5)	19
Total	75	75	150

Calculated value of chi-square = 4.88
Table value of chi-square = 3.841
Coefficient of correlation = 0.177

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the type of health care centre and health care services has weak relationship.

Hypothesis 8

Ho = There is no Relationship between the health care services and the patient's level of satisfaction

H1 = There is Relationship between the health care services and the patient's level of satisfaction

Level of satisfaction	Health care services		Total
	Yes	No	
High	70(45.36)	11(35.64)	81
Low	14(38.64)	14(30.36)	69
Total	84	66	150

Calculated value of chi-square = 54.946
Table value of chi-square = 3.841
Coefficient of correlation = 0.517

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate

hypothesis is accepted, thus it is concluded that the health care services and patient's level of satisfaction has moderate relationship.

Hypothesis 9

Ho = There is no Relationship between the medical care facilities and the patient's level of satisfaction

H1 = there is Relationship between the medical care facilities and the patient's level of satisfaction

Level of satisfaction	Medical care facilities		Total
	Agree	Disagree	
High	81(64.6)	14(30.4)	95
Low	21(37.4)	34(17.6)	55
Total	102	48	150

Calculated value of chi-square = 35.482

Table value of chi-square = 3.841

Coefficient of correlation = 0.437

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the medical care and patient's level of satisfaction has moderate relationship.

Hypothesis 10

Ho = There is no relationship between the type of health care centre and expenses of treatment.

H1 = There is Relationship between type of health care centre and expenses of treatment.

Expenses of treatment	Type of centre		Total
	Government	Private	
Agree	53(42.5)	32(42.5)	85
Disagree	22(32.5)	43(32.5)	65
Total	75	75	150

Calculated value of chi-square = 11.966

Table value of chi-square = 3.841

Coefficient of correlation = 0.271

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate

hypothesis is accepted, thus it is concluded that the type of health care centre and expenses of treatment has weak relationship.

Hypothesis 11

Ho = There is no relationship between the type of health care centre and expenses of treatment.

H1 = there is Relationship between type of health care centre and expenses of treatment.

Level of satisfaction	Expenses of the treatment		Total
	Agree	Disagree	
High	80(65.23)	23(37.76)	103
Low	15(29.76)	32(17.23)	47
Total	95	55	150

Calculated value of chi-square = 29.094

Table value of chi-square = 3.841

Coefficient of correlation = 0.403

As the calculated value of chi-square is higher than, its table value with degree of freedom 1 and level of significance is 0.05 so null hypothesis is rejected and alternate hypothesis is accepted, thus it is concluded that the level of satisfaction and expenses have moderate relationship.

Recommendations

Standardized maternal and child health depends on quality of health care provision, and optimum and sufficient numbers of maternal and child health care centres.

- Pakistan's maternal and child health care system is inadequate, inefficient, and expensive; and comprises an under-funded and inefficient public sector along with a mixed, expensive and unregulated private sector. These poor conditions in the health sector may be attributed to a number of factors like poverty, malnutrition, unequal access to health facilities, inadequate allocation for health, and high population growth and infant mortality. For equity, efficiency and effectiveness of the health sector, inputs from both the public and private sector would be necessary.
- Health is the neglected sector in Pakistan. Reallocation of resources and reformulation of the health strategy that target to benefit the disadvantaged groups more and improve the low income people access to medical services is the desired need of the time. Through better health policy with emphasis on the implication side can make a huge difference in the living standards of the poor.
- Aggressive awareness campaign should be designed to create the optimum level of awareness about maternal and child health care among masses.

- Quality of health care should be focused, essentially in terms of quality of treatment, emergency care, competency of doctors and easy access to delivery services.
- Considering socio-economic conditions of patients should be given priority to analyse the expenditures of maternal and child health, to ultimately reach the maximum level of patient's satisfaction.
- Government should have approach to reduce maternal mortality (MMR) and infant mortality (IMR) by facilitating patients at door step, through various programmes of population welfare and health care like, lady health worker programme. The government should encourage the private sector to train and produce nurses in Pakistan. Indeed Lady Health Worker (LHW) programme can be effective for pregnant females, but limited knowledge through short training cannot cover the place of a professionally trained nurses.
- The private sector is playing a vital role in the health care service delivery in Pakistan. However, this sector needs to be regulated and monitored; government should have strict vigilance for the proceeding and quality of maternal health care being provided by this sector.
- Ethical consideration of the problems, socio-economic and cultural factors and behavioural issues should be taken into account; training programmes should be conducted by the bilateral deliberation of public private partnership (PPP) to engage the health care providing staff, in order to provide timely care and cooperation to the patient.
- The government should invest in nursing colleges to overcome the limited human capital in the health sector. Private sector can play a vital role in this regard as well.

Conclusion

The results and finding of the whole research shows that level of patient's satisfaction is very much related and dependent on health care delivery system. It is observed the majority of the respondents belong to government maternal and child health care centre were lacking the awareness about maternal and child health. Another aspect of government centres is that, majority of the respondents lived below the poverty line and they could not pay even rupee for the services so patients were not able to measure quality of health care; even they do not know about the standard of health care delivery system. In private centre majority of the respondents were literate also well aware and well off but findings shows they were not highly satisfied because they pay a lot for better services but they did not receive standard quality of health care services.

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