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Client Satisfaction: Does Private or Public Health Sector Make a Difference? Results from Secondary Data Analysis in Sindh, Pakistan

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Abstract**—**Introduction: Researchers globally have strived to explore diverse factors that augment the continuation and uptake of family planning methods. Clients' satisfaction is one of the core determinants facilitating continuation of family planning methods. There is a major debate yet scanty evidence to contrast public and private sectors with respect to client satisfaction. The objective of this study is to compare quality-of-care provided by public and private sectors of Pakistan through a client satisfaction lens.

Methods: We used Pakistan Demographic Heath Survey 2012-13 dataset on 3133 women. Ten different multivariate models were made. to explore the relationship between client satisfaction and dependent outcome after adjusting for all known confounding factors and results are presented as OR and AOR (95% CI).

Results: Multivariate analyses showed that clients were less satisfied in contraceptive provision from private sector as compared to public sector (AOR 0.92, 95% CI 0.63-1.68) even though the result was not statistically significant. Clients were more satisfied from private sector as compared to the public sector with respect to other determinants of quality-of-care follow-up care (AOR 3.29, 95% CI 1.95-5.55), infection prevention (AOR 2.41, 95% CI 1.60-3.62), counseling services (AOR 2.01, 95% CI 1.27-3.18, timely treatment (AOR 3.37, 95% CI 2.20-5.15), attitude of staff (AOR 2.23, 95% CI 1.50-3.33), punctuality of staff (AOR 2.28, 95% CI 1.92-4.13), timely referring (AOR 2.34, 95% CI 1.63-3.35), staff cooperation (AOR 1.75, 95% CI 1.22-2.51) and complications handling (AOR 2.27, 95% CI 1.56-3.29).

Discussion: Public sector has successfully attained substantial satisfaction levels with respect to provision of contraceptives, but it contrasts previous literature from a multi country studies. Our study though in is concordance with a study from Tanzania where public sector was more likely to offer family planning services to clients as compared to private facilities.

Conclusion: In majority of the developing countries, public sector is more involved in FP service provision; however, in Pakistan clients' satisfaction in private sector is more, which opens doors for public-private partnerships and collaboration in the near future.

Keywords**—**Client satisfaction, Family Planning, Public private partnership, Quality of care.

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I. Introduction

THE choice of adopting family planning (FP) methods is governed by many factors [1], but majorly hindered due to lack of knowledge. Counseling plays a major role in enhancing potential users' knowledge base and in turn leading them to make the right choice. Client satisfaction though is the key to continuation of FP methods [2].

Family planning provision, despite all the socio-cultural barriers, is facilitated by both public and private sectors in Pakistan. Both the sectors are determined to promote FP method adoption in Pakistan and to contribute significantly towards the increase in Contraceptive Prevalence Rate (CPR). Each sector, with its distinct strategies and tactics, has been able to procure substantial share of clients representing diverse socioeconomic backgrounds. Family planning methods are made available either free or at subsidized price to boost their adoption among potential low-income users. In Pakistan, the public sector usually targets the masses that are non-affording whereas private sector, targets diverse wealth quintiles ranging from poor to rich. Nonetheless, it is quite difficult to proclaim one sector to be better than the other in context of client satisfaction [3], especially in Pakistan where no such study has been previously conducted.

Literature from Kenya states that private facilities represent better physical infrastructure and service availability while public sector has better management systems [4]. Yet, the overall inclination of client satisfaction towards private sector could not be explained by the aforementioned factors. A comparative study of Tanzania, Kenya and Ghana affirmed that client satisfaction with respect to family planning was an outcome of structural factors such as availability of preferred methods, supplies and lesser waiting time in public as compared to the private sector [5]. A study to contrast public and private sectors with respect to family planning provision of services asserts that private sector as compared to the public lags behind and needs to increase provision of services in facilities [6]. Lack of the resources or their mismanagement is one of the fundamental quandaries faced by the developing countries [7]. Hypothetically, this suggests that the private sector could outpace the public sector; however, this is just a conjecture to be proved. It has been observed that clients' privacy and confidentiality in FP service provision needs improvement along with information provided to clients about contraceptive methods [8]. These are the strong characteristics as they affect clients' knowledge about contraceptive methods and decision making [9].

Despite limited resources allotted to the public facilities, more visits are acknowledged by the public sector as compared to private [10]. Is it because of the better or cheaper service provision? Clients that represent lower wealth quintiles might not be able to afford the services provided by the private sector [11]; however, this might not be the only concern here. Social franchising has been actively contributing towards betterment of reproductive health services provision; especially, in the developing countries with lesser income [12]. Thus, there might be other factors facilitating the inclination of clients' satisfaction towards the public sector than private.

This aim of this study is to compare quality of care provided by family planning services in public and private sector in context of client satisfaction.

II. Methods

We used Pakistan Demographic Heath Survey 2012-13 dataset (Sindh province) on a total of 3133 Married Women of Reproductive Age (MWRA) aged 15-49 years. Source of family planning (public/private sector) was the main exposure variable. Outcome variable was client satisfaction judged by ten different dimensions of client satisfaction (provision of contraceptive, follow-up care, infection prevention, counseling services, timely treatment, attitude of staff, punctuality of staff, timely referring, staff cooperation and complications handling.).

Means and standard deviations were calculated for continuous variable while for categorical variable frequencies and percentages were computed. For univariate analysis, Chi-square/Fisher Exact test was used to find an association between clients' satisfaction in public and private sectors and baseline demographics (locality, age, wealth index, current contraceptive method). Ten different multivariate models were made. The covariates were locality, age of MWRA, MWRA's education, wealth index and current use of FP methods. Variables were checked for multi-collinearity, confounding and interaction, and then advanced logistic regression was used to explore the relationship between client satisfaction and dependent outcome after adjusting for all known confounding factors and results are presented as OR and AOR (95% CI).

III. Results

Overall 3133 MWRA were analyzed in the study. Initially univariate analysis was conducted between baseline demographics and public/private sector and results are presented in ten different strata of client satisfaction (Table I).

TABLE I
Univariate Analysis

Provision of contraceptives				
		Satisfied	Not satisfied	p-value
Sterilization	Public	152	25	.011*
	Private	65	2	
Follow-up care				
		Satisfied	Not satisfied	p-value
Locality: Urban	Public	143	27	.007
	Private	156	11	
Locality: Rural	Public	157	71	.000
	Private	91	11	
Age: 35-39	Public	66	26	.008
	Private	48	5	
Age: 40-44	Public	56	20	0.004*
	Private	46	3	
Age: 45-49	Public	51	15	0.005*
	Private	37	1	
Education: No	Public	173	79	.000
	Private	110	15	
Education: Higher	Public	22	5	.007*
	Private	43	0	
Wealth Index: Poorest	Public	89	40	.005
	Private	43	5	
Wealth Index: Poorer	Public	45	26	.047
	Private	25	5	
Wealth Index: Richest	Public	69	11	0.009*
	Private	103	3	
Current Contraceptive Method: IUD	Public	7	6	.026*
	Private	15	1	
Current Contraceptive Method: Sterilization	Public	138	40	.000*
	Private	67	0	
Infection prevention				
Locality: Urban	Public	123	47	0.000
	Private	152	14	
Locality: Rural	Public	127	100	0.012
	Private	72	30	
Age: 20-24	Public	5	7	0.021*
	Private	16	3	
Age: 25-29	Public	39	29	0.001*
	Private	32	4	
Age: 35-39	Public	29	55	0.02
	Private	4	42	
Age: 40-44	Public	36	50	0.002
	Private	11	44	
Age: 45-49	Public	40	26	0.005
	Private	33	5	
Wealth Index: Poorest	Public	64	64	0.033
	Private	32	15	
Wealth Index: Richest	Public	63	17	.000*
	Private	103	2	
Current Contraceptive Method: IUD	Public	21	11	0.017
	Private	38	5	
Current Contraceptive Method: Sterilization	Public	111	67	0.000
	Private	60	7	
Counseling				
Locality: Urban	Public	141	29	0.018
	Private	152	14	
Locality: Rural	Public	156	71	0.02
	Private	82	19	
Age: 25-29	Public	45	23	.018*
	Private	32	4	
Age: 45-49	Public	44	22	.010*
	Private	35	4	
Education: No	Public	180	72	.032*
	Private	102	23	
Education: Higher	Public	21	5	.026*
	Private	42	1	
Wealth Index: Poorest	Public	91	37	0.01

Provision of contraceptives				
		Satisfied	Not satisfied	p-value
Current Contraceptive Method: IUD	Private	43	5	
	Public	8	5	.011*
	Private	16	0	
Current Contraceptive Method: Sterilization	Public	137	41	.001*
	Private	63	4	
Timeliness of Service				
Locality: Urban	Public	127	43	0.00
	Private	154	13	
Locality: Rural	Public	115	113	0.00
	Private	75	26	
Age: 25-29	Public	39	28	0.00*
	Private	34	2	
Age: 30-34	Public	46	37	.002*
	Private	53	14	
Age: 35-39	Public	37	32	.042*
	Private	43	10	
Age: 40-44	Public	46	30	.000*
	Private	44	5	
Age: 45-49	Public	44	22	.010*
	Private	34	4	
Education: No	Public	144	108	0.00
	Private	98	27	
Education: Complete Secondary	Public	25	10	.030*
	Private	36	3	
Education: Higher	Public	17	10	.000*
	Private	42	1	
Wealth Index: Poorest	Public	58	70	0.003
	Private	33	14	
Wealth Index: Middle	Public	34	16	.013*
	Private	26	2	
Wealth Index: Richer	Public	45	24	0.009
	Private	48	8	
Wealth Index: Richest	Public	65	15	.001*
	Private	102	4	
Current Contraceptive Method: Pills	Public	6	10	.015*
	Private	6	0	
Current Contraceptive Method: Injectable	Public	18	14	0.06
	Private	33	10	
Current Contraceptive Method: Sterilization	Public	115	63	0.00
	Private	60	7	
Attitude of Staff				
Locality: Urban	Public	117	53	0.00
	Private	153	13	
Age: 20-24	Public	7	5	.004*
	Private	20	0	
Age: 30-34	Public	54	29	0.035
	Private	54	13	
Age: 45-49	Public	44	22	.010*
	Private	35	4	
Education: Complete Secondary	Public	24	11	.041*
	Private	35	4	
Education: Higher	Public	15	12	.000*
	Private	41	2	
Wealth Index: Richer	Public	49	20	0.012
	Private	50	6	
Wealth Index: Richest	Public	58	22	0.00
	Private	99	6	
Current Contraceptive Method: IUD	Public	8	5	.013*
	Private	15	0	
Current Contraceptive Method: Female Sterilization	Public	122	55	0.002
	Private	59	8	
Punctuality				
Locality: Urban	Public	115	55	0.00
	Private	147	19	
Locality: Rural	Public	102	126	0.00
	Private	69	32	

Provision of contraceptives				
		Satisfied	Not satisfied	p-value
Age: 25-29	Public	33	35	.000*
	Private	32	4	
Age: 30-34	Public	47	35	0.045
	Private	49	18	
Age: 40-44	Public	37	39	0.00
	Private	42	7	
Age: 45-49	Public	35	31	.000*
	Private	34	4	
Education: No	Public	119	133	0.00
	Private	93	32	
Education: Complete Primary	Public	22	15	.022*
	Private	23	3	
Education: Higher	Public	20	6	.046*
	Private	41	2	
Wealth Index: Poorer	Public	29	42	0.001
	Private	23	7	
Wealth Index: Richer	Public	45	24	0.016
	Private	48	9	
Wealth Index: Richest	Public	57	22	0.002
	Private	95	11	
Current Contraceptive Method: Injectable	Public	18	13	0.014
	Private	36	7	
Current Contraceptive Method: Sterilization	Public	90	88	0.00
	Private	56	12	
Referral				
Locality: Urban	Public	108	62	0.00
	Private	135	31	
Locality: Rural	Public	88	139	0.00
	Private	62	40	
Age: 25-29	Public	32	36	0.006
	Private	27	9	
Age: 30-34	Public	38	44	0.018
	Private	44	23	
Age: 40-44	Public	35	41	0.00
	Private	38	11	
Age: 45-49	Public	36	30	0.002
	Private	33	6	
Education: No	Public	108	144	0.00
	Private	80	45	
Education: Complete Primary	Public	21	16	.028*
	Private	22	4	
Education: Higher	Public	14	13	.000*
	Private	38	4	
Wealth Index: Poorest	Public	39	89	0.00
	Private	30	17	
Wealth Index: Middle	Public	26	24	0.021
	Private	22	6	
Wealth Index: Richest	Public	58	22	0.005
	Private	93	12	
Current Contraceptive Method: Sterilization	Public	84	94	0.00
	Private	55	12	
Complications Handling				
Locality: Urban	Public	107	63	0.00
	Private	138	28	
Age: 15-19	Public	0	2	.048*
	Private	5	0	
Age: 25-29	Public	35	33	0.02
	Private	27	9	
Age: 30-34	Public	38	44	0.047
	Private	42	25	
Age: 45-49	Public	36	30	0.027
	Private	29	9	
Education: Complete Primary	Public	21	16	.006*
	Private	24	3	
Education: Higher	Public	16	11	.000*
	Private	41	2	
Wealth Index: Richest	Public	56	24	0.001

Provision of contraceptives				
		Satisfied	Not satisfied	p-value
Current Contraceptive Method: Sterilization	Private	94	11	0.008
	Public	101	77	
	Private	51	17	
Cooperation				
Locality: Urban	Public	110	60	0.00
	Private	147	19	
Age: 25-29	Public	38	30	0.027
	Private	28	8	
Age: 30-34	Public	45	37	0.036
	Private	48	19	
Age: 35-39	Public	46	45	0.013
	Private	38	15	
Age: 40-44	Public	42	34	0.018
	Private	38	12	
Age: 45-49	Public	33	33	0.00
	Private	33	6	
Education: No	Public	114	138	0.001
	Private	80	45	
Education: Complete Secondary	Public	23	12	.022*
	Private	35	4	
Education: Higher	Public	18	8	.016*
	Private	39	3	
Wealth Quintile: Middle	Public	24	25	0.011
	Private	22	6	
Wealth Quintile: Richer	Public	41	28	0.022
	Private	44	12	
Wealth Quintile: Richest	Public	59	21	0.001
	Private	97	8	
Current Contraceptive Method: Condom	Public	11	6	.049*
	Private	29	3	
Current Contraceptive Method: Sterilization	Public	95	82	0.00
	Private	54	13	

TABLE II
MULTIVARIATE ANALYSIS

	Crude OR	Crude OR – CI (95%)	Adjusted OR	Crude AOR – CI (95%)
Satisfaction on provision of contraceptives				
Public/Private*	1.001	0.617 – 1.624	1.03	.63 – 1.68
Satisfaction on follow-up care				
Private/Public**	3.725	2.269 – 6.115	3.29	1.95 – 5.55
Satisfaction on infection prevention				
Private/Public^	2.995	2.045 – 4.387	2.41	1.60 – 3.62
Satisfaction on counseling				
Private/Public^^	2.399	1.564 – 3.681	2.01	1.27 – 3.18
Satisfaction on timeliness				
Private/Public-	3.826	2.576 – 5.683	3.37	2.20 – 5.15
Satisfaction on attitude of staff				
Private/Public--	2.493	1.70 – 3.638	2.23	1.50 – 3.33
Satisfaction on punctuality				
Private/Public~	3.499	2.43 – 5.030	2.82	1.92 – 4.13
Satisfaction on referral				
Private/Public~~	2.858	2.044 – 3.997	2.34	1.63 – 3.35
Satisfaction on complications handling				
Private/Public+	2.130	1.537 – 2.953	1.75	1.22 – 2.51
Satisfaction on cooperation				
Private/Public++	2.760	1.962 – 3.881	2.27	1.56 – 3.29

Then Multivariate analysis was done which showed that clients were less satisfied in contraceptive provision from private sector as compared to public sector (AOR 0.92,95% CI 0.63-1.68) even though the result was not statistically significant. Clients were more satisfied from private sector as compared to the public sector with respect to other determinants of quality-of-care follow-up care (AOR 3.29, 95% CI 1.95-5.55), infection prevention (AOR 2.41, 95% CI 1.60-3.62), counseling services (AOR 2.01, 95% CI 1.27-3.18, timely treatment (AOR 3.37, 95% CI 2.20-5.15), attitude of staff (AOR 2.23, 95% CI 1.50-3.33), punctuality of staff (AOR 2.28, 95% CI 1.92-4.13), timely referring (AOR 2.34, 95% CI 1.63-3.35), staff cooperation (AOR 1.75, 95% CI 1.22-2.51) and complications handling (AOR 2.27, 95% CI 1.56-3.29).

IV. DISCUSSION

In this paper, we strived to contrast public and private sectors of family planning in context of client satisfaction. With respect to the provision of contraceptives, client satisfaction was more inclined towards public sector than private. Our results show that clients who seek sterilization are more satisfied from public sector as compared to the private. Does this mean that public sector outperforms private sector in contraceptive provision or surpasses it in sterilization cases only? Sterilization is a long-term method. Clients opting aforementioned method would barely require another family planning method to limit their family size. Thus, a major contributor to aforesaid satisfaction attribute can be erstwhile interaction with the service provider. A study reported that by 2003, Kenya acknowledged 32% CPR representing modern methods only; in addition, 40% provision of these methods was facilitated by the private sector [13]. Nonetheless, substantial heterogeneity was acknowledged with respect to the quality of care provided by the private sector [14]. In a country where people are troubled by unstable economy, inequality and poverty, the government's active involvement in health care service provision becomes mandatory [15]; yet, the public endeavors in Pakistan appear quite slow.

Another finding showed that clients were more satisfied from private sector with respect to follow-up care. A study carried out in Tanzania found that providers' technical competence in private facilities was more compared to public sector; moreover, client-provider interaction was much more satisfactory in private facilities compared to public [16]. This corroborates another finding of this study – clients being more satisfied with counseling provided by private providers as compared to public. Family planning counseling is mandatory for married women of reproductive age to avoid early discontinuation; counseling addresses concerns like method failure which can cause dissatisfaction [17]. Provider-patient interaction significantly facilitates correct method use; any discrepancy or miscommunication can lead to negative use of contraceptive method [18].

Clients seeking FP methods are usually recommended a follow-up visit. In rural localities, clients that prefer short-term methods usually visit the facilities for method provision due to unavailability. However, clients preferring long-term methods are recommended a follow-up visit if they experience any side-effects or in case of emergency. Providers' competence adds more value to the continuation of long-term methods;

especially, if the client is experiencing any side-effects. Further, client-providers interaction also determines the success-failure ratio of the follow-up visit.

We also found that clients were more satisfied from private facilities pertaining infection prevention. Another study conducted in Jamaica found that private facilities had better equipment and ample supplies [19]. In addition, private providers have sound technical knowledge and expertise as compared to public. Thus, the risk of infection is certainly lower in private facilities as compared to public. In our study, we also found that clients were more satisfied from private providers regarding complications handling. This refers to the fact that provider competence, availability of supplies and equipment significantly facilitate complications handling in private facilities. Greenstar Social Marketing, one of the non-governmental organizations in Pakistan, designs and implements sophisticated clinical training counseling programs for independent female physicians and paramedics to facilitate the provision of family planning services [20]. Not only Greenstar Social Marketing but many other donor-supported organizations strive towards the betterment of FP service provision.

We also found that clients were more satisfied from private facilities as compared to public with respect to cooperation. It has been noticed that a very few providers ask clients for their family planning or contraceptive needs [21]. The decision of spacing or limiting family size is of great importance especially in countries where family planning is subjected to diverse socio-cultural barriers. Provider's enforcement in decision-making is one of the core reasons for clients to less likely adopt modern methods where provider is an influential authority; whereas, traditional method adoption is on the rise because these methods are less likely to be provider-dependent [22]. Thus, the client must have her say in selection of a contraceptive method.

We also found some other factors such as timeliness, punctuality, provider referral and attitude of staff where client satisfaction was more inclined towards private sector as compared to public. The environment of service delivery, facility ambiance and other provider characteristics can significantly facilitate a client to adopt or reject family planning methods [23]. Clients visiting a family planning facility for counseling end up adopting a method if enthused by aforementioned factors. However, if a client is asked to wait in the line for hours, she will more likely be dissatisfied and probably prefer a traditional method over the modern.

V. Conclusion

In majority of the developing countries, public sector is more involved in FP service provision; however, in Pakistan clients' satisfaction in private sector is more, which opens doors for public-private partnerships and collaboration in the near future.

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