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

Wajiha Javed, Arsalan Jabbar, Nelofer Mehboob, Muhammad Tafseer, Zahid Memon

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, Chisquare/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

UNIVARIATE ANALYSIS Provision of contraceptives							
P	10 1181011 0	Satisfied	Not satisfied	p-value			
	Public	Satisfied 152	Not satisfied 25				
Sterilization	Private	65	2	.011*			
		Follow-up care					
		Satisfied	Not satisfied	p-value			
T 1' TT1	Public	143	27	•			
Locality: Urban	Private	156	11	.007			
Locality: Rural	Public	157	71	.000			
Locality. Kurai	Private	91	11	.000			
Age: 35-39	Public	66	26	.008			
1180.000	Private	48	5	.000			
Age: 40-44	Public	56	20	0.004*			
S	Private	46	3				
Age: 45-49	Public	51	15	0.005*			
	Private	37 173	1 79				
Education: No	Public Private	110	15	.000			
	Public	22	5				
Education: Higher	Private	43	0	.007*			
	Public	89	40				
Wealth Index: Poorest	Private	43	5	.005			
	Public	45	26				
Wealth Index: Poorer	Private	25	5	.047			
TV 14 T 1 D' 1	Public	69	11	0.000#			
Wealth Index: Richest	Private	103	3	0.009*			
Current Contraceptive	Public	7	6	026*			
Method: IUD	Private	15	1	.026*			
Current Contraceptive	Public	138	40	.000*			
Method: Sterilization	Private	67	0	.000			
	Infection	n prevention					
Locality: Urban	Public	123	47	0.000			
Zovanij. Oroan	Private	152	14	0.000			
Locality: Rural	Public	127	100	0.012			
,	Private	72 -	30				
Age: 20-24	Public	5	7	0.021*			
	Private Public	16 39	3 29				
Age: 25-29	Private	32	4	0.001*			
	Public	29	55				
Age: 35-39	Private	4	42	0.02			
	Public	36	50				
Age: 40-44	Private	11	44	0.002			
	Public	40	26				
Age: 45-49	Private	33	5	0.005			
W14b I. d D	Public	64	64	0.022			
Wealth Index: Poorest	Private	32	15	0.033			
Wealth Index: Richest	Public	63	17	.000*			
	Private	103	2	.000			
Current Contraceptive	Public	21	11	0.017			
Method: IUD	Private	38	5				
Current Contraceptive	Public	111	67	0.000			
Method: Sterilization	Private	60	7				
		ınseling	20				
Locality: Urban	Public Private	141 152	29 14	0.018			
	Public	156	71				
Locality: Rural	Private	82	19	0.02			
Age: 25-29	Public	45	23				
	Private	32	4	.018*			
	Public	44	22				
Age: 45-49	Private	35	4	.010*			
T1 (37	Public	180	72	.032*			
Education: No	Private	102	23				
Education High-	Public	21	5	026*			
Education: Higher	Private	42	1	.026*			
Wealth Index: Poorest	Public	91	37	0.01			

p.	rovision o	of contracepti	ives			rovision o	of contraceptiv	7PC	
	10 1131011 0	Satisfied	Not satisfied	p-value		to vision c	Satisfied	Not satisfied	p-value
	Private	43	5	1	A gas 25, 20	Public	33	35	.000*
Current Contraceptive	Public	8	5	.011*	Age: 25-29	Private	32	4	.000
Method: IUD	Private	16	0	.011	Age: 30-34	Public	47	35	0.045
Current Contraceptive		137	41	.001*	1190. 30 31	Private	49	18	0.015
Method: Sterilization	Private	63	4		- Age: 40-44	Public	37	39	0.00
		ess of Service			-	Private Public	42 35	7 31	
Locality: Urban	Public	127 154	43	0.00	Age: 45-49	Private	34	4	.000*
	Private Public	115	13 113			Public	119	133	
Locality: Rural	Private	75	26	0.00	Education: No	Private	93	32	0.00
	Public	39	28		Education: Complete	Public	22	15	
Age: 25-29	Private	34	2	0.00*	Primary	Private	23	3	.022*
	Public	46	37	0.004	Education Higher	Public	20	6	046*
Age: 30-34	Private	53	14	.002*	Education: Higher	Private	41	2	.046*
A ~~. 25 20	Public	37	32	.042*	Wealth Index: Poorer	Public	29	42	0.001
Age: 35-39	Private	43	10	.042**	wearm muex. Foorer	Private	23	7	0.001
Age: 40-44	Public	46	30	.000*	Wealth Index: Richer	Public	45	24	0.016
Age. 40-44	Private	44	5	.000	Weath mack. Rener	Private	48	9	0.010
Age: 45-49	Public	44	22	.010*	Wealth Index: Richest	Public	57	22	0.002
1160. 13 17	Private	34	4	.010		Private	95	11	
Education: No	Public	144	108	0.00	Current Contraceptive	Public	18	13	0.014
	Private	98	27		Method: Injectable	Private	36	7	
Education: Complete		25	10	.030*	Current Contraceptive Method: Sterilization	Private	90 56	88 12	0.00
Secondary	Private	36	3 10		Wethod: Stermzation		eferral	12	
Education: Higher	Public Private	17 42	10	.000*		Public	108	62	
	Public	58	70		Locality: Urban	Private	135	31	0.00
Wealth Index: Poorest	Private	33	14	0.003		Public	88	139	
	Public	34	16		Locality: Rural	Private	62	40	0.00
Wealth Index: Middle	Private	26	2	.013*		Public	32	36	
	Public	45	24		Age: 25-29	Private	27	9	0.006
Wealth Index: Richer	Private	48	8	0.009		Public	38	44	0.010
W 1.1 I D'1	Public	65	15	001*	Age: 30-34	Private	44	23	0.018
Wealth Index: Richest	Private	102	4	.001*	A ~~. 40 44	Public	35	41	0.00
Current Contraceptive	Public	6	10	.015*	Age: 40-44	Private	38	11	0.00
Method: Pills	Private	6	0	.013	Age: 45-49	Public	36	30	0.002
Current Contraceptive		18	14	0.06	11ge. 45-47	Private	33	6	0.002
Method: Injectable	Private	33	10	0.00	Education: No	Public	108	144	0.00
Current Contraceptive		115	63	0.00		Private	80	45	
Method: Sterilization	Private	60	7		Education: Complete	Public	21	16	.028*
		de of Staff	50		Primary -	Private	22	4	
Locality: Urban	Public	117	53	0.00	Education: Higher	Public Private	14 38	13 4	*000
	Private	153	13			Public	39	89	
Age: 20-24	Public	20	5 0	.004*	Wealth Index: Poorest	Private	30	17	0.00
	Private Public	54	29			Public	26	24	
Age: 30-34	Private	54	13	0.035	Wealth Index: Middle	Private	22	6	0.021
	Public	44	22		W M I D D D	Public	58	22	0.005
Age: 45-49	Private	35	4	.010*	Wealth Index: Richest	Private	93	12	0.005
Education: Complete		24	11	0.414	Current Contraceptive	Public	84	94	0.00
Secondary	Private	35	4	.041*	Method: Sterilization	Private	55	12	0.00
•	Public	15	12	000*		Complica	tions Handlin	g	
Education: Higher	Private	41	2	.000*		Public	107	63	0.00
Wealth Index: Richer	Public	49	20	0.012	Locality: Urban	Private	138	28	0.00
vv caimi mucx. Nicher	Private	50	6	0.012	Age: 15-19	Public	0	2	.048*
Wealth Index: Richest	Public	58	22	0.00	11gc. 15-17	Private	5	0	.070
	Private	99	6	0.00	Age: 25-29	Public	35	33	0.02
Current Contraceptive		8	5	.013*		Private	27	9	
Method: IUD	Private	15	0		Age: 30-34	Public	38	44	0.047
Current Contraceptive		122	55	0.002	g . .	Private	42	25	
Method: Female Sterilization	Private	59	8	0.002	Age: 45-49	Public	36	30	0.027
Stermanion	Pıır	nctuality			-	Private	29	9	
	Public	115	55		_ Education: Complete Primary	Public Private	21 24	16 3	.006*
Locality: Urban	Private	147	19	0.00	•	Private	24 16	3 11	
* 11. P. 1	Public	102	126		Education: Higher	Private	41	2	*000
Locality: Rural	Private	69	32	0.00	Wealth Index: Richest	Public	56	24	0.001

Provision of contraceptives						
		Satisfied	Not satisfied	p-value		
	Private	94	11			
Current Contraceptive	Public	101	77	0.008		
Method: Sterilization	Private	51	17	0.008		
Cooperation						
I lite a II da - a	Public	110	60	0.00		
Locality: Urban	Private	147	19	0.00		
A ~~. 25 20	Public	38	30	0.027		
Age: 25-29	Private	28	8	0.027		
A car 20 24	Public	45	37	0.036		
Age: 30-34	Private	48	19	0.030		
A 25 20	Public	46	45	0.012		
Age: 35-39	Private	38	15	0.013		
A car 40, 44	Public	42	34	0.018		
Age: 40-44	Private	38	12	0.018		
Age: 45-49	Public	33	33	0.00		
Age: 43-49	Private	33	6	0.00		
Education: No	Public	114	138	0.001		
Education: No	Private	80	45	0.001		
Education: Complete	Public	23	12	.022*		
Secondary	Private	35	4	.022*		
Education: Higher	Public	18	8	.016*		
Education. Figure	Private	39	3	.010		
Wealth Quintile: Middle	Public	24	25	0.011		
wearin Quintile. Middle	Private	22	6	0.011		
Wealth Quintile: Richer	Public	41	28	0.022		
wearin Quintile. Kicher	Private	44	12	0.022		
Wealth Quintile: Richest	Public	59	21	0.001		
wearin Quintile. Richest	Private	97	8	0.001		
Current Contraceptive	Public	11	6	.049*		
Method: Condom	Private	29	3	.049		
Current Contraceptive	Public	95	82	0.00		
Method: Sterilization	Private	54	13	0.00		

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			
	Satisfa	action on timelin	ess				
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 nongovernmental 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 donorsupported 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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