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## Performance of the Provincial Government of Khyber Pakhtunkhwa (2013-18) in Terms of Reforms Introduced in the Health Department

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**Key Words:** Reforms, Public Satisfaction, Performance, Health Department, Khyber Pakhtunkhwa

**Abstract:** This article examined the performance of the provincial government of Khyber Pakhtunkhwa (KP) (2013-18) in terms of the reforms introduced in the health department in association with the level of public satisfaction. The study revealed that the level of public satisfaction is up to an average extent (35.90%) with the introduced reforms in the health department of KP. It is based on the primary data collected from the general public and experts randomly from a sample size of 464 respondents in districts Peshawar and Charsadda. In making the statistical analysis the chi-square test, p-value and percentage method have been used.

### Introduction

Government introduces reforms in every sector in order to enhance the efficiency of the respective sector or department. The term reform actually refers to a positive change for improving the performance of the sector that brings meaningful changes for improving efficiency and effectiveness (Islam, Health Sector Reform in Pakistan: Why is it needed? March 2002). Thus health is one of those sectors that directly linked the government to the public. Reforms in the health care system involve many things including financing and organization of the service provider to the package of the services to be offered. It includes improving and protecting the quality of services, enhancing equity and creating new resources for the system (Islam, April 2002). Health Reforms can be that purposeful sustained changes that improve the efficiency, equity and effectiveness of the health sector (Raymond L. Goldsteen, 2017).

The health sector reforms can be categorised into the funding changes, managerial changes and policy changes. It is also comprised of a number of

interventions, policies and strategies that are designed in such a way that it may achieve better public health goals (Tania Dmytraczenko, 2003). Health reforms are introduced by almost all the major, developed and developing states like the USA, UK, Australia etc. In our neighbourhood, India and Iran are among those states that want to revive their healthcare system and improve its efficacy by implementing reforms.

In this connection, reforms in the health care system were attempted in Pakistan in the past. But the current reforms were initiated in Khyber Pakhtunkhwa after the promulgation of the Medial Teaching Institution (MTI) Reforms Act in 2015 (Zahid Kamal, 2021). In the current study under the umbrella of the health sector reforms, the focus is on the policy changes introduced by the provincial government of KP (2013-18) in the provincial health department in order to improve the structure and the function of the health care. The study argued that the respondents are satisfied to an average extent (35.90%) with the introduced reforms in the health sector.

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The current study operationalized the performance of the provincial government of KP (2013-18) in the health department regarding the reforms introduced. The government of PTI in its tenure (2013-18) introduced various reforms in the provincial health department comprising the MTI Reforms Act, Medical Aid Act, Health Care Commission Act, Mental Act, Safe Blood Transfusion Act, Health Foundation Act, Child Nutrition Act and Protection of Breastfeeding etc. (Tribune, 2018). These reforms highlighted the performance of the provincial government of KP during (2013-18) with respect to the level of public satisfaction in the light of the following indicated questions.

### **Methodology**

The current empirical study is applied in nature and is based on quantitative and analytical methods. Primary data has been collected from the general community whereas experts in the health department were also interviewed through a questionnaire. The literature was covered through secondary data available in the forms of books, journals, articles, newspapers, government publications, booklets, records, and published official and non-official reports of elections and party manifestos.

### **Operationalisation Of The Variables**

The domain of the study is health departments where the health department in the current study means the provincial health department of Khyber Pakhtunkhwa comprising primary, secondary and tertiary care. In the same way, the reforms mean the reforms introduced and implemented by the

provincial government in Khyber Pakhtunkhwa (2013-18) in the health department. However, public satisfaction means the perception of the performance where a greater extent means government perform well and an average extent means the average performance of the government while a lower extent is marked as poor performance of the provincial government.

### **Sampling Method**

A simple random sampling technique was used for conducting this survey in District Charsadda and Peshawar. Amongst the four towns of district Peshawar rural and urban ones were selected. Likewise, in district Charsadda there is a total of three tehsils of which two tehsils were selected on a rural and urban basis.

### **Sample Size**

The criteria for the number of respondents was selected by using the Yamane formula ( $n = \frac{N}{1 + N \cdot e^2}$ ) where n is the sampling size, N is the total population and e is the margin of error, which is 5%.

Calculating the sample size while using the Yamane sample size calculator by putting the total population of 5.8 million (Statistics, 2017) comes to be 399.97 around figure 400. But for knowing the expert views it is taken as 464. This number of respondents was taken from the general public of the two districts.

**Q 1.** To which extent are you satisfied with the reforms introduced in the health sector in KP (2013-18)?

**Table 1**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	102 30.3%	151 44.8%	84 24.9%	337 100.0%	0.032	0.984
	Female	28 30.1%	41 44.1%	24 25.8%	93 100.0%		
	Total	130 30.2%	192 44.7%	108 25.1%	430 100.0%		
Age	18-30	45 40.9%	33 30.0%	32 29.1%	110 100.0%	21.748	0.000
	31-40	55 33.7%	73 44.8%	35 21.5%	163 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Education	41and Above	30	86	41	157	15.912	0.044
		19.1%	54.8%	26.1%	100.0%		
	Total	130	130	192	108		
		30.2%	30.2%	44.7%	25.1%		
	Illiterate	19	47	34	100		
		19.0%	47.0%	34.0%	100.0%		
	Matriculate	14	27	17	58		
		24.1%	46.6%	29.3%	100.0%		
	Intermediate	35	46	24	105		
		33.3%	43.8%	22.9%	100.0%		
Graduate	43	43	24	110			
	39.1%	39.1%	21.8%	100.0%			
Postgraduate	19	29	9	57			
	33.3%	50.9%	15.8%	100.0%			
Total	130	192	108	430			
	30.2%	44.7%	25.1%	100.0%			
Profession	Government	21	27	6	54	31.855	0.000
	Servant	38.9%	50.0%	11.1%	100.0%		
	Private Service	19	38	22	79		
	Sector	24.1%	48.1%	27.8%	100.0%		
	Businessmen & Shopkeepers	19	51	21	91		
		20.9%	56.0%	23.1%	100.0%		
	Health	6	14	1	21		
	Experts	28.6%	66.7%	4.8%	100.0%		
	Education	13	9	5	27		
	Experts	48.1%	33.3%	18.5%	100.0%		
Others	52	53	53	158			
	32.9%	33.5%	33.5%	100.0%			
Total	130	192	108	430			
	30.2%	44.7%	25.1%	100.0%			
Monthly Income	PKR 21000 and Below	30	72	30	72	14.808	0.005
		20.4%	49.0%	20.4%	49.0%		
	PKR 22000 and Above	53	79	53	79		
		31.5%	47.0%	31.5%	47.0%		
	Sorry	47	41	47	41		
	40.9%	35.7%	40.9%	35.7%			
Total	130	192	130	192			
	30.2%	44.7%	30.2%	44.7%			
Area	Rural	79	142	66	287	8.137	0.017
		27.5%	49.5%	23.0%	100.0%		
	Urban	51	50	42	143		
		35.7%	35.0%	29.4%	100.0%		
Total	130	192	108	430			
	30.2%	44.7%	25.1%	100.0%			

### Explanation

A significant number of health experts by profession (66.7%) followed by the respondents of the age group 41 and above (54.8%), the postgraduate respondents (50.9%), the rural respondents (49.5%), respondents with lower income group of PKR 21000 and below (49.0%) and male respondents (44.8%) have responded in favour of satisfaction with the reforms introduced in the health department. The chi-square test conveyed a significant p-value in favour of age, education, profession, monthly income and the variable of area. This significance confirmed a strong association between the reforms introduced

by the provincial government of KP (2013-18) with all of the above-mentioned significant variables excluding gender showing an insignificant p-value that leads to the disassociation of the reforms introduced and public satisfaction.

It also portrayed that the health experts were confident about the performance of the provincial government of KP (2013-18) in introducing effective reforms in the health system.

**Q 2.** To which extent are you satisfied with the performance of mti in the health sector in KP (2013-18)?

**Table 2**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	93 27.6%	132 39.2%	112 33.2%	337 100.0%	0.468	0.791
	Female	29 31.2%	35 37.6%	29 31.2%	93 100.0%		
	Total	122 28.4%	167 38.8%	141 32.8%	430 100.0%		
Age	18-30	44 40.0%	27 24.5%	39 35.5%	110 100.0%	16.777	0.002
	31-40	36 22.1%	70 42.9%	57 35.0%	163 100.0%		
	41and Above	42 26.8%	70 44.6%	45 28.7%	157 100.0%		
	Total	122 28.4%	167 38.8%	141 32.8%	430 100.0%		
Education	Illiterate	25 25.0%	31 31.0%	44 44.0%	100 100.0%	23.754	0.003
	Matriculate	14 24.1%	31 53.4%	13 22.4%	58 100.0%		
	Intermediate	40 38.1%	35 33.3%	30 28.6%	105 100.0%		
	Graduate	35 31.8%	40 36.4%	35 31.8%	110 100.0%		
	Postgraduate	8 14.0%	30 52.6%	19 33.3%	57 100.0%		
	Total	122 28.4%	167 38.8%	141 32.8%	430 100.0%		
Profession	Government	10 18.5%	31 57.4%	13 24.1%	54 100.0%	21.026	0.021
	Servant	23 29.1%	35 44.3%	21 26.6%	79 100.0%		
	Private	27 29.7%	37 40.7%	27 29.7%	91 100.0%		
	Service Sector	6 29.7%	10 40.7%	5 29.7%	21 100.0%		
	Businessmen & Shopkeepers						
	Total	6 29.7%	10 40.7%	5 29.7%	21 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Monthly Income	Health Experts	28.6%	47.6%	23.8%	100.0%	39.184	0.000
	Education Experts	5	10	12	27		
	Others	18.5%	37.0%	44.4%	100.0%		
		51	44	63	158		
		32.3%	27.8%	39.9%	100.0%		
	Total	122	167	141	430		
	PKR 21000 and Below	28.4%	38.8%	32.8%	100.0%		
		52	29	66	147		
	PKR 22000 and Above	36	90	42	168		
		21.4%	53.6%	25.0%	100.0%		
Area	Sorry	34	48	33	115	1.102	0.576
		29.6%	41.7%	28.7%	100.0%		
	Total	122	167	141	430		
		52	29	66	147		
	Rural	81	116	90	287		
	28.2%	40.4%	31.4%	100.0%			
	41	51	51	143			
	28.7%	35.7%	35.7%	100.0%			
	122	167	141	430			
	28.4%	38.8%	32.8%	100.0%			

**Explanation**

A reasonable number of the respondents from within the government servants (57.4%) followed by the matriculate respondents (53.4%), respondents with PKR 22000 and above group (53.6%), senior respondents aged 41 and above group (44.6%), the respondents of the rural area (40.4%) and male respondents (39.2%) have confessed to an average extent of satisfaction with the performance of the MTI. A significant -value is elaborated by the chi-square test in favour of the variables of age, education, profession and monthly income. Likewise, it further examined an insignificant p-value for the gender and locality of

the respondents. The significant variables show a close association with the performance of the MTI and insignificant variables showed disapproval of the performance of the MTI in the health system introduced by the government.

It further illustrated that the respondents of the government servants by profession appreciated the performance of the provincial government of KP (2013-18) for the reforms in the health sector.

**Q 3.** To which extent was mti effective in improving the health sector in KP (2013-18)?

**Table 3**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	88	139	110	337	10.270	0.006
		26.1%	41.2%	32.6%	100.0%		
	Female	40	32	21	93		
		43.0%	34.4%	22.6%	100.0%		
	Total	128	171	131	430		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Age	18-30	29.8%	39.8%	30.5%	100.0%	7.731	0.102
		42	43	25	110		
	31-40	38.2%	39.1%	22.7%	100.0%		
		48	61	54	163		
	41and Above	29.4%	37.4%	33.1%	100.0%		
		38	67	52	157		
Total	24.2%	42.7%	33.1%	100.0%			
Education	Total	128	171	131	430	24.034	0.002
	Illiterate	29.8%	39.8%	30.5%	100.0%		
		24	34	42	100		
	Matriculate	24.0%	34.0%	42.0%	100.0%		
		20	19	19	58		
	Intermediate	34.5%	32.8%	32.8%	100.0%		
		38	34	33	105		
	Graduate	36.2%	32.4%	31.4%	100.0%		
		32	49	29	110		
	Postgraduate	29.1%	44.5%	26.4%	100.0%		
		14	35	8	57		
Total	24.6%	61.4%	14.0%	100.0%			
Profession	Total	128	171	131	430	27.940	0.002
	Government	29.8%	39.8%	30.5%	100.0%		
		11	23	20	54		
	Servant	20.4%	42.6%	37.0%	100.0%		
		16	38	25	79		
	Private	20.3%	48.1%	31.6%	100.0%		
		22	35	34	91		
	Service Sector Businessmen & Shopkeepers	24.2%	38.5%	37.4%	100.0%		
		10	8	3	21		
	Health Experts	47.6%	38.1%	14.3%	100.0%		
		5	17	5	27		
Education Experts	18.5%	63.0%	18.5%	100.0%			
	64	50	44	158			
Others	40.5%	31.6%	27.8%	100.0%			
	128	171	131	430			
Monthly Income	Total	29.8%	39.8%	30.5%	100.0%	20.011	0.000
	PKR 21000 and Below	56	38	53	147		
		38.1%	25.9%	36.1%	100.0%		
	PKR 22000 and Above	44	74	50	168		
		26.2%	44.0%	29.8%	100.0%		
	Sorry	28	59	28	115		
Area	Total	24.3%	51.3%	24.3%	100.0%	4.280	0.118
	Rural	128	171	131	430		
		29.8%	39.8%	30.5%	100.0%		
	Urban	80	124	83	287		
		27.9%	43.2%	28.9%	100.0%		
Total	48	47	48	143			
		33.6%	32.9%	33.6%	100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
	Total	128 29.8%	171 39.8%	131 30.5%	430 100.0%		

**Explanation**

A sizable number of the elderly respondents aged 41 and above group (42.7%) were seconded by the male respondents (41.2%), the postgraduate respondents (61.4%), the respondents serving the education sector (63.0%), the respondents of the undisclosed monthly income (51.3%) and the rural respondents (43.2%) are satisfied to an average extent with the effectivity of the MTI in improving the health sector. Applying the chi-square test portrayed significant p-values for gender, education, profession and monthly income. In the same, an insignificant value is forwarded for the consideration of the variables of age and area. It also advanced with the disconnection between the insignificant variables and the effectivity of the

MTI in improving the health sector. On the other hand, the significant variables showed a connection with the improvements noticed in the health sector after the introduction of MTI by the provincial government of KP (2013-18) for revising the health system.

The information inquired that the education experts have credited the performance of the provincial government of KP (2013-18) for introducing public-oriented reforms in the health department in order to enhance the public with health curing privileges.

- Q 4. To which extent did mti improve the performance of doctors in the health sector in KP (2013-18)?

**Table 4**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	102 30.3%	137 40.7%	98 29.1%	337 100.0%	10.048	0.007
	Female	19 20.4%	31 33.3%	43 46.2%	93 100.0%		
	Total	121 28.1%	168 39.1%	141 32.8%	430 100.0%		
Age	18-30	43 39.1%	26 23.6%	41 37.3%	110 100.0%	19.410	0.001
	31-40	41 25.2%	65 39.9%	57 35.0%	163 100.0%		
	41and Above	37 23.6%	77 49.0%	43 27.4%	157 100.0%		
	Total	121 28.1%	168 39.1%	141 32.8%	430 100.0%		
Education	Illiterate	17 17.0%	49 49.0%	34 34.0%	100 100.0%	15.040	0.058
	Matriculate	17 29.3%	27 46.6%	14 24.1%	58 100.0%		
	Intermediate	34 32.4%	40 38.1%	31 29.5%	105 100.0%		
	Graduate	36 32.7%	35 31.8%	39 35.5%	110 100.0%		
	Postgraduate	17 29.8%	17 29.8%	23 40.4%	57 100.0%		
	Total	121	168	141	430		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Profession		28.1%	39.1%	32.8%	100.0%	18.639	0.045
	Government	17	26	11	54		
	Servant	31.5%	48.1%	20.4%	100.0%		
	Private	24	34	21	79		
	Service Sector	30.4%	43.0%	26.6%	100.0%		
	Businessmen & Shopkeepers	21	33	37	91		
	Health	23.1%	36.3%	40.7%	100.0%		
	Experts	8	7	6	21		
	Education	38.1%	33.3%	28.6%	100.0%		
	Experts	10	3	14	27		
	Others	37.0%	11.1%	51.9%	100.0%		
	41	65	52	158			
	25.9%	41.1%	32.9%	100.0%			
	121	168	141	430			
	28.1%	39.1%	32.8%	100.0%			
Monthly Income	PKR 21000 and Below	30	36	81	147	54.001	0.000
	PKR 22000 and Above	48	79	41	168		
	Sorry	28.6%	47.0%	24.4%	100.0%		
		43	53	19	115		
		37.4%	46.1%	16.5%	100.0%		
	121	168	141	430			
	28.1%	39.1%	32.8%	100.0%			
Area	Rural	85	120	82	287	7.015	0.030
	Urban	29.6%	41.8%	28.6%	100.0%		
		36	48	59	143		
		25.2%	33.6%	41.3%	100.0%		
	121	168	141	430			
	28.1%	39.1%	32.8%	100.0%			

### Explanation

A good number of the elderly age (49.0%) illiterate (49.0%) rural respondents (41.8%) responded to an average extent of pleasure while the female respondents (46.2%), the education experts (51.9%) and those having a lower income of PKR 21000 and below (55.1%) were pleased to a lower extent with the improvements in the performance of the doctors serving in the health care centres. A significant p-value is acquired after the chi-square test is applied for the variables of gender, age, education, profession, monthly income and area in terms of the rural/urban division. The significant variables demonstrated a good relationship

between all the mentioned variables and the improved performance of the doctors serving in the provincial health department because its p-value < 0.05.

It also examined that the respondents of the lower income group rated the performance of the provincial government of KP (2013-18) as poor in terms of the improvements noticed in the performance of the doctors with the introduction of the MTI for enhancing the health care system.

- Q 5. To which extent did mti enhance the attendance ratio of doctors in the health sector in KP (2013-18)?



**Table 5**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	125 37.1%	127 37.7%	85 25.2%	337 100.0%	5.732	0.057
	Female	39 41.9%	23 24.7%	31 33.3%	93 100.0%		
	Total	164 38.1%	150 34.9%	116 27.0%	430 100.0%		
Age	18-30	47 42.7%	39 35.5%	24 21.8%	110 100.0%	11.695	0.020
	31-40	49 30.1%	69 42.3%	45 27.6%	163 100.0%		
	41and Above	68 43.3%	42 26.8%	47 29.9%	157 100.0%		
	Total	164 38.1%	150 34.9%	116 27.0%	430 100.0%		
Education	Illiterate	32 32.0%	29 29.0%	39 39.0%	100 100.0%	14.870	0.062
	Matriculate	24 41.4%	18 31.0%	16 27.6%	58 100.0%		
	Intermediate	39 37.1%	39 37.1%	27 25.7%	105 100.0%		
	Graduate	48 43.6%	37 33.6%	25 22.7%	110 100.0%		
	Postgraduate	21 36.8%	27 47.4%	9 15.8%	57 100.0%		
	Total	164 38.1%	150 34.9%	116 27.0%	430 100.0%		
Profession	Government	23 42.6%	14 25.9%	17 31.5%	54 100.0%	17.962	0.056
	Private	33 41.8%	30 38.0%	16 20.3%	79 100.0%		
	Service Sector	38 41.8%	20 22.0%	33 36.3%	91 100.0%		
	Businessmen & Shopkeepers	10 47.6%	6 28.6%	5 23.8%	21 100.0%		
	Health Experts	9 33.3%	12 44.4%	6 22.2%	27 100.0%		
	Education Experts	51 32.3%	68 43.0%	39 24.7%	158 100.0%		
	Others	164 38.1%	150 34.9%	116 27.0%	430 100.0%		
	Total	75 51.0%	42 28.6%	30 20.4%	147 100.0%		
Monthly Income	PKR 21000 and Below	44 26.2%	61 36.3%	63 37.5%	168 100.0%	26.994	0.000
	PKR 22000 and Above	45 39.1%	47 40.9%	23 20.0%	115 100.0%		
	Sorry	164 38.1%	150 34.9%	116 27.0%	430 100.0%		
	Total	75 38.1%	42 34.9%	30 27.0%	147 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Area	Rural	117 40.8%	88 30.7%	82 28.6%	287 100.0%	6.784	0.034
	Urban	47 32.9%	62 43.4%	34 23.8%	143 100.0%		
	Total	164 38.1%	150 34.9%	116 27.0%	430 100.0%		

### Explanation

A considerable number of the elderly respondents (43.3%), male respondents (41.9%), the health experts by profession (47.6%) with a low monthly income of PKR 21000 and below (51.0%) strongly supported while the postgraduate (47.4%) and the respondents of the urban area (43.4%) have supported the enhancement of the attendance of the doctors to an average extent with the introduction of the MTI in the health sector. The variable of gender, age, profession, monthly income and area have got a significant p-value after the chi-square test is applied. This further strengthened the connection of the significant

variables with the MTI enhancement of the doctors' attendance ratio, while disconnecting the insignificant variable with the enhanced attendance ratio of the doctors in the health sector for getting p-value < 0.05 and > 0.05 respectively.

It further elaborated that the lower income group of respondents approved of the government while the postgraduate respondents disapproved of the performance of the provincial government of KP (2013-18) for initiation of the public favoured health reforms in the health department.

**Q 6.** To which extent was the polio control policy effective in KP (2013-18)?

**Table 6**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	140 41.5%	107 31.8%	90 26.7%	337 100.0%	0.649	0.723
	Female	41 44.1%	31 33.3%	21 22.6%	93 100.0%		
	Total	181 42.1%	138 32.1%	111 25.8%	430 100.0%		
Age	18-30	53 48.2%	30 27.3%	27 24.5%	110 100.0%	5.309	0.257
	31-40	69 42.3%	48 29.4%	46 28.2%	163 100.0%		
	41and Above	59 37.6%	60 38.2%	38 24.2%	157 100.0%		
	Total	181 42.1%	138 32.1%	111 25.8%	430 100.0%		
Education	Illiterate	31 31.0%	31 31.0%	38 38.0%	100 100.0%	15.081	0.058
	Matriculate	29 50.0%	13 22.4%	16 27.6%	58 100.0%		
	Intermediate	45 42.9%	38 36.2%	22 21.0%	105 100.0%		
	Graduate	51 46.4%	36 32.7%	23 20.9%	110 100.0%		
	Postgraduate	25 46.4%	20 32.7%	12 20.9%	57 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Profession	Total	43.9%	35.1%	21.1%	100.0%	12.375	0.261
		181	138	111	430		
	Government	42.1%	32.1%	25.8%	100.0%		
	Servant	24	24	6	54		
	Private	44.4%	44.4%	11.1%	100.0%		
	Service Sector	34	24	21	79		
	Businessmen & Shopkeepers	43.0%	30.4%	26.6%	100.0%		
	Health	33	30	28	91		
	Experts	36.3%	33.0%	30.8%	100.0%		
	Education	12	6	3	21		
	Experts	57.1%	28.6%	14.3%	100.0%		
	Others	12	8	7	27		
	Experts	44.4%	29.6%	25.9%	100.0%		
	Others	66	46	46	158		
Monthly Income	Total	41.8%	29.1%	29.1%	100.0%	27.560	0.000
		181	138	111	430		
	PKR 21000 and Below	42.1%	32.1%	25.8%	100.0%		
	PKR 22000 and Above	84	27	36	147		
	Sorry	57.1%	18.4%	24.5%	100.0%		
	Sorry	52	67	49	168		
	Sorry	31.0%	39.9%	29.2%	100.0%		
Area	Total	45	44	26	115	8.131	0.017
		39.1%	38.3%	22.6%	100.0%		
	Rural	181	138	111	430		
	Urban	42.1%	32.1%	25.8%	100.0%		
	Total	126	99	62	287		
Urban	43.9%	34.5%	21.6%	100.0%			
Total	55	39	49	143			
Total	38.5%	27.3%	34.3%	100.0%			
Total	181	138	111	430			
Total	42.1%	32.1%	25.8%	100.0%			

**Explanation**

An important number of the younger respondents of the 18-30 age group (48.2%), the matriculate (50.0%), the female respondents (44.1%), the health experts (57.1%) with low monthly income group of PKR 21000 and below (57.1%) from the rural area (43.9%) have supported the polio control policy initiated by the government. The chi-square test furnished insignificant p-values for gender, age and profession, while it showed significant values for the variables of education, monthly income and the area. The significant variables illustrated

linkages with effective polio countering policy while it is discontinued by the insignificant variables of gender, age and profession for its p-value > 0.05.

It also investigated that the health experts and the lower income group of respondents were pleased with the performance of the provincial government in adopting beneficial policies for countering polio in the province.

**Q 7.** To which extent was the policy of population control effective in KP (2013-18)?

**Table 7**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	138 40.9%	101 30.0%	98 29.1%	337 100.0%	10.653	0.005
	Female	21 22.6%	38 40.9%	34 36.6%	93 100.0%		
	Total	159 37.0%	139 32.3%	132 30.7%	430 100.0%		
Age	18-30	40 36.4%	37 33.6%	33 30.0%	110 100.0%	3.186	0.527
	31-40	55 33.7%	59 36.2%	49 30.1%	163 100.0%		
	41and Above	64 40.8%	43 27.4%	50 31.8%	157 100.0%		
	Total	159 37.0%	139 32.3%	132 30.7%	430 100.0%		
Education	Illiterate	51 51.0%	20 20.0%	29 29.0%	100 100.0%	19.550	0.012
	Matriculate	23 39.7%	15 25.9%	20 34.5%	58 100.0%		
	Intermediate	35 33.3%	34 32.4%	36 34.3%	105 100.0%		
	Graduate	33 30.0%	47 42.7%	30 27.3%	110 100.0%		
	Postgraduate	17 29.8%	23 40.4%	17 29.8%	57 100.0%		
	Total	159 37.0%	139 32.3%	132 30.7%	430 100.0%		
Profession	Government	10 18.5%	23 42.6%	21 38.9%	54 100.0%	27.395	0.002
	Servant	39 49.4%	24 30.4%	16 20.3%	79 100.0%		
	Private	37 40.7%	23 25.3%	31 34.1%	91 100.0%		
	Service Sector	7 40.7%	10 25.3%	4 34.1%	21 100.0%		
	Businessmen & Shopkeepers	5 33.3%	15 47.6%	7 19.0%	27 100.0%		
	Health	18.5%	55.6%	25.9%	100.0%		
	Experts	61 38.6%	44 27.8%	53 33.5%	158 100.0%		
	Others	159 37.0%	139 32.3%	132 30.7%	430 100.0%		
Monthly Income	PKR 21000 and Below	62 42.2%	45 30.6%	40 27.2%	147 100.0%	11.678	0.020
	PKR 22000 and Above	54 32.1%	67 39.9%	47 28.0%	168 100.0%		
	Sorry	43 37.4%	27 23.5%	45 39.1%	115 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Area	Total	159 37.0%	139 32.3%	132 30.7%	430 100.0%	0.943	0.624
	Rural	105 36.6%	97 33.8%	85 29.6%	287 100.0%		
	Urban	54 37.8%	42 29.4%	47 32.9%	143 100.0%		
	Total	159 37.0%	139 32.3%	132 30.7%	430 100.0%		

**Explanation**

A sufficient number of the illiterate (51.0%), the elderly respondents of 41 and above age group (40.8%), the respondents of the lower income group of PKR 21000 and below (42.2%) and the urban respondents (37.8%) were satisfied to a greater extent with the policy of population control. In the same way, the female respondents (40.9%) and the education experts by profession (55.6%) have recommended effective population control policy to an average extent. The chi-square test provided significant P-values for gender, education, profession and monthly income, while the variables of age and area received insignificant

P-values. It signified that the significant variables were closely associated with the population control for its p-value < 0.05 and the insignificant variables were isolated from the policies adopted for the population control.

It further illustrated that the education experts followed by the illiterate respondents commended the government of KP during (2013-18) for adopting favourable policies for population control in the province.

**Q 8.** To what extent was the policy of supervision of pharmacies effective in KP (2013-18)?

**Table 8**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	139 41.2%	108 32.0%	90 26.7%	337 100.0%	10.746	0.005
	Female	23 24.7%	45 48.4%	25 26.9%	93 100.0%		
	Total	162 37.7%	153 35.6%	115 26.7%	430 100.0%		
Age	18-30	44 40.0%	45 40.9%	21 19.1%	110 100.0%	4.728	0.316
	31-40	59 36.2%	55 33.7%	49 30.1%	163 100.0%		
	41and Above	59 37.6%	53 33.8%	45 28.7%	157 100.0%		
	Total	162 37.7%	153 35.6%	115 26.7%	430 100.0%		
Education	Illiterate	41 41.0%	36 36.0%	23 23.0%	100 100.0%	15.496	0.050
	Matriculate	30 51.7%	19 32.8%	9 15.5%	58 100.0%		
	Intermediate	39 37.1%	34 32.4%	32 30.5%	105 100.0%		
	Graduate	33 30.0%	48 43.6%	29 26.4%	110 100.0%		

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Profession	Postgraduate	19	16	22	57	17.969	0.055
		33.3%	28.1%	38.6%	100.0%		
	Total	162	153	115	430		
		37.7%	35.6%	26.7%	100.0%		
	Government	13	28	13	54		
	Servant	24.1%	51.9%	24.1%	100.0%		
	Private	30	23	26	79		
	Service Sector	38.0%	29.1%	32.9%	100.0%		
	Businessmen & Shopkeepers	43	27	21	91		
	Health	47.3%	29.7%	23.1%	100.0%		
	Experts	4	8	9	21		
	Education	19.0%	38.1%	42.9%	100.0%		
	Experts	9	9	9	27		
	Others	33.3%	33.3%	33.3%	100.0%		
	63	58	37	158			
	39.9%	36.7%	23.4%	100.0%			
	162	153	115	430			
	37.7%	35.6%	26.7%	100.0%			
Monthly Income	PKR 21000 and Below	52	55	40	147	20.494	0.000
		35.4%	37.4%	27.2%	100.0%		
	PKR 22000 and Above	51	75	42	168		
		30.4%	44.6%	25.0%	100.0%		
	Sorry	59	23	33	115		
	51.3%	20.0%	28.7%	100.0%			
	162	153	115	430			
	37.7%	35.6%	26.7%	100.0%			
Area	Rural	99	108	80	287	3.747	0.154
		34.5%	37.6%	27.9%	100.0%		
	Urban	63	45	35	143		
		44.1%	31.5%	24.5%	100.0%		
	162	153	115	430			
	37.7%	35.6%	26.7%	100.0%			

### Explanation

A good number of the matriculate respondents (51.7%), the undisclosed income group (51.3%) and the urban respondents (44.1%) strongly supported the supervisory policy of the pharmacies. While the female respondents (48.4%), the younger respondents of the 18-30 age group (40.9%) and the government servants by profession (51.9%) rated the supervisory policy as average. The chi-square test gave a significant p-value for the variables of gender, education, profession and monthly income. It gave an insignificant p-value for the consideration of the variables of age and area. The p-value < 0.05

guided the strong alliance between the significant variables and the supervision of the pharmacies in the province. While the p-value > 0.05 disengaged the insignificant variables and the government regularisation of the pharmacies.

It further informs that the respondents from within the government servant by profession highly favoured the government and supported its performance in terms of the regularisation of the pharmacies in order to enhance result-oriented reforms in the health system.

**Q 9.** To which extent was the policy of malaria control effective in KP (2013-18)?

**Table 9**

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Gender	Male	111 32.9%	87 25.8%	139 41.2%	337 100.0%	0.019	0.991
	Female	30 32.3%	24 25.8%	39 41.9%	93 100.0%		
	Total	141 32.8%	111 25.8%	178 41.4%	430 100.0%		
Age	18-30	41 37.3%	28 25.5%	41 37.3%	110 100.0%	7.567	0.109
	31-40	48 29.4%	35 21.5%	80 49.1%	163 100.0%		
	41and Above	52 33.1%	48 30.6%	57 36.3%	157 100.0%		
	Total	141 32.8%	111 25.8%	178 41.4%	430 100.0%		
Education	Illiterate	26 26.0%	19 19.0%	55 55.0%	100 100.0%	25.214	0.001
	Matriculate	13 22.4%	15 25.9%	30 51.7%	58 100.0%		
	Intermediate	49 46.7%	22 21.0%	34 32.4%	105 100.0%		
	Graduate	34 30.9%	37 33.6%	39 35.5%	110 100.0%		
	Postgraduate	19 33.3%	18 31.6%	20 35.1%	57 100.0%		
	Total	141 32.8%	111 25.8%	178 41.4%	430 100.0%		
Profession	Government	18 33.3%	20 37.0%	16 29.6%	54 100.0%	22.879	0.011
	Private	26 32.9%	18 22.8%	35 44.3%	79 100.0%		
	Service Sector	28 30.8%	13 14.3%	50 54.9%	91 100.0%		
	Businessmen & Shopkeepers	5 23.8%	11 52.4%	5 23.8%	21 100.0%		
	Health Experts	8 29.6%	9 33.3%	10 37.0%	27 100.0%		
	Education Experts	56 35.4%	40 25.3%	62 39.2%	158 100.0%		
	Others	141 32.8%	111 25.8%	178 41.4%	430 100.0%		
	Total	47 32.0%	32 21.8%	68 46.3%	147 100.0%		
	PKR 21000 and Below	48 28.6%	56 33.3%	64 38.1%	168 100.0%		
	PKR 22000 and Above	46 40.0%	23 20.0%	46 40.0%	115 100.0%		
Monthly Income	Sorry	141 32.8%	111 25.8%	178 41.4%	430 100.0%	10.218	0.037

Variables	Sub-Category	Greater Extent	Average Extent	Lower Extent	Total	Chi-Square Value	P-Value
Area	Rural	96 33.4%	84 29.3%	107 37.3%	287 100.0%	7.630	0.022
	Urban	45 31.5%	27 18.9%	71 49.7%	143 100.0%		
	Total	141 32.8%	111 25.8%	178 41.4%	430 100.0%		

### Explanation

A substantial number of the illiterate (55.0%), female respondents (41.9%), respondents of the middle age group of 31-40 (49.1%), self-employed group the businessmen and shopkeepers by profession (54.9%), respondents of the lower income group of PKR 21000 and below (46.3%) belonging to the urban areas (49.7%) meagrely supported the counter malaria policy adopted by the provincial government of KP (2013-18). The chi-square test issued significant results of p-values in favour of the variables comprising the education, profession, monthly income and area of the livelihood of the respondents. It further confirmed that gender and age were declared insignificant in this case. The significant variables have p-value < 0.05 and were in syndication with the effective counter-malaria policy, while there is no relationship between the insignificant variables and the efficacy of the malaria control policy initiated by the government in Khyber Pakhtunkhwa.

It also unearthed that the illiterate respondents were conveniently satisfied with the performance of the provincial government of Khyber Pakhtunkhwa for adopting such reforms in the health department that facilitated the common people and were in a position to acquire top-class health curing privileges in the public sector hospitals.

### Conclusion

The provincial government of PTI after coming into power in Khyber Pakhtunkhwa (2013-18) get a chance for converting its electoral manifesto into policies. The electoral manifesto highlighted the provision of world-class health facilities. In this connection, a number of reforms were introduced in the health sector. It tried to ensure health

insurance and granted autonomy to the medical teaching institutes under the MTI Act of 2015. The study revealed that the reforms introduced in the provincial health sector satisfied the public to an average extent (35.90%).

Health reforms are also important to be understood in terms of the variable including gender, age group, education, profession, monthly income and rural and urban division. In considering gender, the male respondents are more satisfied in comparison with female respondents with the performance of the provincial government of KP (2013-18) in terms of the introduced reforms. In reference to the age group, the middle age group respondents are more satisfied. The graduated respondents are more satisfied with the health reforms. The professional consideration revealed that the professionals of the private services sector are crediting the government for the introduction of good reforms in the health department. As for the monthly income, consideration is concerned, the respondents having a high-income group of 22000 and above are pleased with the provincial government. Likewise, the rural respondents have encouraged the provincial government for providing health facilities in the rural health care centres.

The Pakistan Tehrik-e-Insaf gave high hope and expectations to the public in running an electoral campaign for the 2013 general elections and announced upgrading the standard of the health care centres. Thus after assuming power it tried its best for improving the healthcare sector which is unearthed in the study. The study revealed that the public is satisfied with the performance of the provincial government of PTI in KP (2013-18) which leads to the applicability of the expectancy disconfirmation theory.



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