CHAPTER -IV

CHAPTER - IV
ANALYSIS AND INTERPRETATION OF DATA

This Chapter deals with the analysis and interpretation of the data collected from the respondents, through a structured schedule (Appendix-2).

The responses from the respondents were elicited with the help of a total 41 statements and 8 questions divided into four broad groups, viz.

I. Primary information,

II. Building and equipments,

III. Services

    (A)   Medical,

    (B)   Control of Diseases,

    (C)   Water supply and environmental sanitation,

    (D)   Poverty eradication and foodgrains,

    (E)   Literacy and health education,

    (F)   Maternal and child health,

            including Family Welfare,

    (G)   Immunization,

    (H)   School health,

    (I)   Behaviour of PHC's staff,

IV. Views, Comments and Suggestions.

(A) MEDICAL SERVICES:

Table 4.1 (on the following page) shows the weighted average response from the respondents for each of the statements under 'Medical Services' Section.

Table 4.1 shows the weighted average response as well as average of 'weighted average response' regarding the medical services offered by the PHCs. The last column of the Table shows weighted average response computed for each of the statements and the score of 3.39 as the composite weighted average response for the entire Table. This mean response of 3.39 derived from the sample of 200 and drawn from seven areas (villages) of Chandgad taluka, lies in the range of agreement, since the 5-point Likert Scale was used to record the responses (5 points for 'strongly-agree' to 1 point for 'strongly-disagree' and a mid-point of 3 for 'uncertain'). This agreement indicates favourable response towards the services provided by the PHCs.

The following hypothesis was set, in order to know whether the services provided by the PHCs were varying with the area under study:

HO: "There is no significant difference between the areas and services offered by PHC s."

The calculated value of Chi-square (1.60) for the sample is less than the calculated value of Chi-square (9.39) at 18 df. This indicates that the medical services offered by PHC's do not vary with the areas under study.

Table 4.1

(73)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
1.	Out-patients are examined satisfactorily in the PHCs.	3.88	2.07	3.74	3.35	3.76	3.96	3.61	24.57	3.51
2.	Indoor-patients are treated well in the PHCs.	4.00	2.50	4.10	3.48	4.03	4.36	3.71	26.81	3.74
3.	Medical Officer visits frequently to your village.	3.09	2.13	2.93	1.32	3.53	2.00	1.48	16.48	2.35
4.	Health-visitor, Auxiliary Nurse Midwife, Health-assistant, visits your village once in a week.	4.25	2.17	4.23	4.03	4.17	4.40	4.48	27.73	3.96
	Total	15.22	8.87	15.00	12.18	15.49	14.72	13.48	94.96	13.56
	Average:	3.81	2.22	3.75	3.05	3.87	3.68	3.37	23.74	3.39

(B)   CONTROL OF DISEASES:

Table 4.2 (on the following page) shows the weighted average response as well as average of "weighted average response" regarding services rendered by the PHCs in controlling diseases, such as leprosy, malaria and tuberculosis.

Table 4.2 shows the weighted average response from the respondents regarding the services offered by PHCs to control the diseases such as leprosy, malaria, blindness, tuberculosis.   The last column shows the weighted average response computed for each of the statements and a score of 2.66 as the composite average response for the entire Table. This mean response of 2.66 derived from the sample of 200 and drawn from seven areas (villages) of Chandgad taluka, lies in the range of disagreement, since a 5-point Likert Scale was used to record the responses (5 points for 'strongly-agree' to 1 point for 'strongly disagree' and a mid-point of 3 for 'uncertain'). This disagreement indicates a composite unfavourable response towards the services provided by the PHCs.

The following hypothesis was set in order to know whether the services provided by the PHCs were varying with the areas under study:

HO: "There is no significant difference between the areas and services offered by PHCs."

Table 4.2

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
5.	Diagnostic and curative facilities on leprosy are developing since last five years.	2.28	2.43	3.48	2.16	4.27	3.24	3.81	21.67	3.10
6.	Malaria is under control since last five years.	3.84	3.53	4.23	2.45	3.97	3.88	3.81	25.71	3.67
7.	Advanced treatment facilities are available for tuberculosis cases in the PHCs.	3.69	3.17	3.29	1.97	3.63	2.80	3.52	22.07	3.15
8.	Eye-care team frequently visits your primary schools.	1.84	1.47	1.80	1.23	2.43	2.32	1.86	12.95	1.85
9.	Several alternatives are available in controlling the blindness since last five years.	4.03	1.77	4.06	4.23	4.13	4.60	4.10	26.92	3.85
10.	Diagnostic and curative facilities for cancer are available in PHCs.	1.75	1.63	1.06	1.74	1.53	1.08	1.86	10.65	1.52
11.	Your diet contains iodized (TATA) salt.	1.44	2.33	1.39	1.10	1.33	1.56	1.33	10.48	1.50
	Total:	18.87	16.33	19.31	14.88	21.29	19.48	20.29	130.45	18.64
	Average:	2.70	2.33	2.76	2.13	3.04	2.78	2.90	18.64	2.66

The calculated Chi-square value (4.36) for the sample is less than the tabulated value (20.128) of Chi-square at 36 df. This indicates that the services offered by the PHCs for the control of diseases did not vary with the areas under study.

(C)   WATER SUPPLY AND ENVIRONMENTAL SANITATION:

Table 4.3 (on the following page) shows the weighted average response as well as average of "weighted average response" regarding the services offered by the PHCs in supplying clean drinking water and to maintain environmental sanitation.

Table 4.3 shows the weighted average response from the respondents regarding services offered by PHCs in supplying clean drinking-water and maintaining environmental sanitation. The calculated score of 2.28 from the last column of this Table shows the composite weighted average response for the entire Table. This mean response of 2.28 derived from the sample lies in the range of disagreement, since 5-point Likert Scale was used to record the responses. This disagreement indicates a composite unfavourable response towards the services provided by the PHCs.

The following hypothesis was set in order to know whether the services provided by PHCs were varying with the areas under study:

Table 4.3

(77)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
12.	Supply of safe drinking water in your village is satisfactory, since last five years.	2.28	2.60	3.61	1.00	3.83	3.88	1.66	18.86	2.69
13.	Disposal of waste-water, animal-waste and human-waste are proper in your village.	3.34	1.57	2.87	1.19	3.07	1.16	1.90	15.10	2.16
14.	Architectural plan is compulsory according to PHC and Grampanchayat's rules to build new house.	3.41	2.83	2.45	1.06	1.46	1.28	1.43	13.92	1.99
	Total:	9.03	7.00	8.93	3.25	8.36	6.32	4.99	47.88	6.84
	Average:	3.01	2.33	2.98	1.08	2.79	2.11	1.66	15.96	2.28

HO: "There is no significant difference between the areas and the services offered by the PHCs."

The calculated Chi-square value (3.16) for the sample is less than the tabulated value (5.226) of Chi-square at 12 df. This indicates that the services offered by the PHCs in providing clean drinking water and maintaining environmental sanitation did not vary with the areas under study.

(D)   FOODGRAIN AND POVERTY ERADICATION:

Table 4.4 (on the following page) shows the weighted average response as well as "average of weighted average response" regarding foodgrains and poverty eradication.

Table 4.4 shows the weighted average response regarding foodgrains and poverty eradication. The last column of this Table shows weighted average response computed for each of the statements and the score of 3.21 as the composite weighted average response for the entire Table. This mean response of 3.21 derived from the sample of 200 respondents. It lies in the range of agreement, since 5-point Likert Scale was used to record the responses. This agreement indicates a composite favourable response towards supply of foodgrains and poverty eradication.

The following hypothesis was set, in order to know whether the provision of foodgrains and poverty eradication were varying with the areas under study:

Table 4.4

(79)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
15.	Working of the Government-approved rationing shop found satisfactory in your village.	4.25	1.90	3.97	3.61	3.53	4.12	3.95	25.33	3.62
16.	Good quality foodgrains are supplid through the rationing shop.	2.06	2.23	2.32	2.58	2.83	3.20	2.52	17.74	2.53
17.	Before five years, you were cropping very few foodgrains	4.06	2.27	4.29	4.13	4.33	4.44	4.04	27.56	3.94
18.	The Government has stressed fully the poverty eradication programme	4.38	2.73	4.39	4.13	4.10	4.56	4.19	28.48	4.07
19.	You are self-sufficient in fulfilling your essential needs.	3.06	3.00	3.23	2.94	4.17	3.44	3.86	23.70	3.39
20.	Poverty is merely on paper as no one is poor.	1.84	2.23	1.25	1.68	1.66	1.92	1.57	12.15	1.73
	Total:	19.65	14.36	19.45	19.07	20.62	21.61	20.13	134.96	19.28
	Average:	3.28	2.39	3.24	3.18	3.44	3.61	3.36	22.50	3.21

HO: "There is no significant difference between
the areas and the supply of foodgrains and poverty
eradication".

The calculated Chi-square value of 2.11 for the
sample is less than the tabulated value (18.492) of Chi-square
at 30 df. This indicates that the supply of foodgrains and
poverty eradication did not vary with the areas under study.

(E) LITERACY AND HEALTH EDUCATION:

Table 4.5 (on the following page) shows the weighted
average response as well as "average of weighted average
responses" regarding the services offered by the Government
to literate the people and impart the knowledge about health.

Table 4.5 shows the weighted average response
regarding the services offered by the Government Agencies
such as schools, PHCs, Adult Education (Saksharata Abhiyan)
teams, radio, television, to literate the people and impart
the knowledge about health. The last column of the Table
shows the weighted average response computed for each of
the statements and a score of 3.68 as a composite weighted
average response for the entire Table. This mean response
of 3.68 derived from the sample of 200 beneficiary-respondents
who were randomly drawn from seven areas (villages) of Chandgad
taluka, lies in the range of agreement since 5-point Likert
Scale was used to record the resposes. This agreement indicates

Table 4.5

(81)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
21.	Literacy programme is an appreciable work of the Government.	4.34	4.17	4.35	4.26	4.60	4.68	4.57	30.97	4.42
22.	In your village, 100% literacy has been achieved.	2.06	1.83	1.55	1.58	1.90	1.28	2.61	12.81	1.83
23.	You are provided with valuable information on health through radio, television and PHC's staff members.	4.34	3.90	3.87	3.94	4.17	4.12	3.90	28.24	4.03
24.	Eye-camps are increasing since last five years.	4.16	3.03	4.19	4.10	4.06	4.36	3.33	27.23	3.89
25.	People have accepted small family norms following the Family Planning Programme.	4.47	2.23	4.90	4.68	4.50	4.72	4.24	29.74	4.25
	Total:	19.37	15.16	18.86	18.56	19.23	19.16	18.65	128.99	18.42
	Average:	3.87	3.03	3.77	3.71	3.85	3.83	3.73	25.79	3.68

a composite favourable response towards the services provided by the Government agencies.

The following hypothesis was set, in order to know whether the services provided by the Government Agencies were varying with the areas under study:

HO: "There is no significant difference between the areas and services offered by the Government Agencies."

The calculated Chi-square value of 1.22 for the sample is less than the tabulated value (13.848) of Chi-square at 24 df. This indicates that the services offered by the Government Agencies to literate the people and impart the knowledge on health did not vary with the areas under study.

(F) MATERNAL AND CHILD HEALTH (MCH) AND FAMILY WELFARE (FW):

Table 4.6 (on the following page) shows the weighted average response as well as average of "weighted average response" from the respondents regarding the services offered by the PHCs on the maternal and child health and family welfare.

Table 4.6 shows the weighted average response as well as average of "weighted average response" regarding the services offered by the PHCs to reduce the infant mortality rate and also to reduce the growth rate of population. The last column of the Table shows the weighted average response

Table 4.6

(83)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
26.	Trained Dai is working in your village.	3.53	2.60	3.39	2.26	3.53	4.00	2.66	21.97	3.14
27.	Proper care of the pregnant women is being taken during pregnancy by the household members and in the PHC.	3.66	2.67	3.48	2.29	2.83	3.72	2.67	21.32	3.05
28.	Intra-natal facilities are well in the PHCs.	3.63	2.43	3.71	2.71	3.17	4.44	3.81	23.90	3.41
29.	Copper-T (Tambi), Nirodh, Oral-pills, family planning operations are followed for family planning and family welfare.	4.44	3.50	4.45	4.77	3.76	4.42	4.57	30.01	4.29
	Total:	15.26	11.20	15.03	12.03	13.29	16.68	13.71	97.20	13.89
	Average:	3.82	2.80	3.76	3.00	3.32	4.17	3.42	24.29	3.47

computed for each of the statements and a score of 3.47 as the composite weighted average response for the entire Table. This mean response of 3.47 derived from the sample drawn from the study area lies in the range of agreement. This agreement indicates composite favourable response towards the services provided by the PHCs.

The following hypothesis was set, in order to know whether the services provided by the PHCs were varying with the areas under study:

HO: "There is no significant difference between the areas and services offered by the Primary Health Centres."

The calculated Chi-square value of 1.08 for the sample is less than the tabulated value (9.39) of Chi-square at 18 df. This indicates that the services offered by the Primary Health Centres for the reduction of infant mortality rate and to reduce the growth rate of population did not vary with the areas under study.

(G) IMMUNIZATION:

Table 4.7 (on the following page) shows the weighted average response from the respondents about the services offered to immunize the children by the PHCs.

Table 4.7 shows the weighted average response

Table 4.7

(85)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
30.	Several vaccines are available to protect children from communicable diseases.	3.19	2.10	3.13	2.84	2.17	2.96	2.48	18.97	2.70
31.	All your children have been vaccinated in the PHC.	4.13	3.43	4.12	3.84	4.13	4.36	3.71	27.72	3.96
32.	Because of vaccination, children become free from communicable diseases.	1.56	3.13	3.65	4.03	3.43	4.00	3.90	23.70	3.39
	Total:	8.88	8.66	10.90	10.71	9.73	11.32	10.09	70.29	10.05
	Average:	2.96	2.89	3.63	3.57	3.24	3.77	3.36	23.42	3.35

as well as the average of "weighted average response" regarding the services rendered by the PHCs to immunize the children against diseases such as polio, tuberculosis, typhoid, malaria, blindness, etc. The last column of the Table shows the weighted aaverage response computed for each of the statements and a score of 3.35 as the composite weighted average response. for the entire Table. This mean response of 3.35 derived from the sample of 200 and drawn from seven areas (villages) of Chandgad taluka, lies in the range of agreement, since the 5-point Likert Scale was used to record the responses. This agreement indicates a composite favourable response towards the services provided by the PHCs.

The following hypothesis was set, in order to know whether the services provided by the PHCs were varying with the areas under study:

HO: "There is no significant difference between the areas and services offered by the PHCs."

The calculated Chi-square value of 1.42 is less than the tabulated value (5.226) of Chi-square at 12 df. This indicates that the services offered by the PHCs for the immunization did not vary with the areas under study.

(H) SCHOOL HEALTH:

Table 4.8 (on the following page) shows the weighted average response as well as the average of "weighted average

Table 4.8

(87)

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
33.	school (Primary School) going children are examined every year by the PHC staff.	2.84	3.27	2.65	3.10	3.77	4.00	4.14	23.77	3.40
34.	School climate in your village is clean and healthy	3.25	2.83	3.06	1.52	4.03	3.08	4.14	21.91	3.13
	Total:	6.09	6.10	5.71	4.62	7.80	7.08	8.28	45.68	3.53
	Average:	3.05	3.05	2.86	2.31	3.90	3.54	4.14	22.84	3.26

response" from the respondents regarding the services about school-health rendered by the PHCs.

Table 4.8 shows the weighted average response about the services rendered by the PHCs relating to the school-health. The last column of the Table shows the weighted average response computed for each of the statements and the score of 3.26 as the composite weighted average response for the entire Table. This mean response of 3.26 derived from the sample of 200 respondents, lies in the range of agreement. This agreement indicates a favourable response towards the services rendered by the PHCs regardig the school-health.

The following hypothesis was set, in order to know whether the services were varying with the areas under study:

HO: "There is no significant difference between the areas under study and the services".

The calculated Chi-square value of 1.04 for the sample is less than the tabulated value (1.635) of Chi-square at 6 df. This indicates that the services rendered by the PHCs did not vary with the areas under study.

(1) BEHAVIOUR OF PHC STAFF:

Table 4.9 shows the weighted average response as well as average of "weighted average response" of the

Table 4.9

Sr. No.	Statements	Kowad	Chandgad	Adkur	Nagan-wadi	Shiva-nage	Amroli	Motan-wadi	Total	Average
35.	You were treated well by the PHC-staff during your visit to a PHC.	4.16	2.77	4.19	2.29	3.80	4.20	3.90	25.31	3.62
36.	Services are rendered promptly in the PHCs.	3.59	2.33	3.48	1.68	3.76	3.96	3.42	22.22	3.17
37.	Any patient can be cured in the PHCs.	3.28	2.77	3.13	2.90	2.93	3.00	3.33	21.34	3.05
38.	Treatment facilities on minor as well as major diseases are available in the PHCs.	1.69	2.10	2.03	1.06	2.07	1.-3	1.67	12.1 υ	1.73
	Total:	12.72	9.97	12.83	7.93	12.56	12.64	12.32	80.97	11.57
	Average:	3.18	2.49	3.21	1.98	3.14	3.16	3.08	20.24	2.89

respondents for each of the statements made on the behaviour of the PHC staff.

Table 4.9 shows the weighted average response from the respondents regarding the behaviour of the PHC staff. The calculated score of 2.89, from the last column of this Table, shows the composite weighted average response for the entire Table. This mean response of 2.89 derived from the sample drawn from seven areas (villages) of Chandgad taluka, lies in the range of disagreement, since 5-point Likert Scale was used to record the responses. This disagreement indicates unfavourable response towards the behaviour of the PHC staff.

The following hypothesis was set, in order to know whether the behaviour of the PHC staff was varying with the areas under study:

HO: "There is no significant difference between the areas and the behaviour of the PHC staff".

The calculated Chi-square value of 1.20 for the sample is less than the tabulated value (9.39) of chi-square at 18 df. This indicates that the behaviour of the PHC staff did not vary with the areas under study.

Table 4.10 (on the following page) shows the Chi-square values calculated for various sections of the services rendered by the Primary Health Centres.

Table 4.10

Sr. No.	Services offered by PHCs.	Calculated value of Chi-square (χ^2)	Tabulated value of Chi-square (χ^2)	Null Hypothesis Accepted/ Rejected
(A)	Medical services	1.60	9.39	Accepted
(B)	Control of diseases	4.36	20.128	Accepted
(C)	Water-supply and Environmental Sanitation	3.26	5.226	Accepted
(D)	Foodgrains and Poverty Eradication	2.11	18.492	Accepted
(E)	Literacy and Health Education	1.22	13.848	Accepted
(F)	MCH and FW	1.08	9.39	Accepted
(G)	Immunization	1.42	5.226	Accepted
(H)	School-health	1.04	1.635	Accepted
(I)	Behaviour of PHCs' Staff	1.20	9.39	Accepted

Table 4.10 lists the various services offered by the Primary Health Centres and their respective calculated and tabulated Chi-square values. The Table infers that there is no significant difference at 5% level of significance between the services offered by the Primary Health Centres and the areas under study. In turn, it means that the responses

of the sample are indicative that the Primary Health Centres'
services are very much the same among the areas under study.

† † †