

# *Results*

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The results obtained from the study are represented in the following tables:

***Table (1):***

Shows age distribution in months in persistent and acute cases. It is revealed that 75.7 % of persistent and 67.3 % of acute cases were below 1 year. But this is not significant statistically ( $P > 0.05$ ).

***Table (2):***

Shows the mean age in months of both persistent and acute cases. It is  $11.5 \pm 8.7$  months in persistent and  $11.7 \pm 8.6$  in acute. This is not statistically significant ( $P = 0.45$ ).

***Table (3):***

Shows sex distribution both in persistent and acute. For persistent 50 % were males and 50 % were females but for acute 58.6 % were males and 41.4 % were female. This is insignificant statistically ( $P = 0.30$ ).

***Table (4):***

shows the nutritional status of both persistent and acute diarrhea cases. 64.3 % of persistent cases were malnourished

while 44.3 % of acute cases were malnourished. The difference was statistically significant ( $P = 0.017$ ).

**Table (5):**

Shows residence in both persistent and acute diarrhea cases. For persistent 74.3 % were rural and 25.7 % were urban- while for acute 72.8 % were rural while 27.1 % were urban. But the difference was insignificant statistically ( $P = 0.94$ ).

**Table (6):**

Shows maternal education both in acute and persistent diarrhea cases. For persistent 52.2 % of mother were non educated while 47.1 of acute diarrhea cases mothers were not educated. The difference was insignificant ( $P = 0.3$ ).

**Table (7):**

Shows housing conditions in both persistent and acute diarrhea cases. It revealed that 34.3 % of persistent cases were living in good housing while 55.7 % of acute cases were living in good housing. The difference was significant ( $P = <0.001$ ).

**Table (8):**

Shows the socioeconomic conditions in relation to persistent and acute diarrhea cases. 68.6 % of persistent were

of low socioeconomic standard while 45.7 % of acute cases were of low socioeconomic standard the difference - was statistically significant ( $P < 0.01$ ).

**Table (9):**

Shows number of house holdings in both persistent and acute diarrhea cases. It is revealed that more than 6 house holding was present in 41.5 % of persistent cases while it is only 20 % in acute cases. The difference was significant ( $P < 0.02$ ).

**Table (10):**

Shows the mean number of house holdings in both persistent and acute diarrhea cases. It is 6 2.7 in persistent and 5.2 1.9 in acute cases. The difference was significant ( $P < 0.001$ ).

**Table (11):**

Shows the feeding pattern before illness both in acute and persistent diarrhea cases. It revealed that 27.1 % were breast fed in persistent while 37.1 % were breast fed in artificial. The difference was insignificant ( $P = 0.61$ ).

**Table (12):**

Shows the mean duration of breast feed in months in persistent and acute cases. It was  $7.06 \pm 6.03$  in persistent

**Table (17):**

Mean number of packets of ORS used before coming in persistent and acute diarrhea cases. It was  $15.84 \pm 2.7$  packets in persistent and  $5.83 \pm 5.9$  packets in acute cases. The result is significant ( $P < 0.0001$ ).

**Table (18):**

It shows the time of administration of ORS in persistent and acute diarrhea cases. It is revealed that 37 % of cases in persistent used ORS at onset while 55.8 % of acute cases used ORS at onset. But it is insignificant ( $P = 0.28$ ).

**Table (19):**

Shows use of antibiotics and sulfa drugs in persistent and acute diarrhea cases. It is revealed that 38.6 % of persistent cases used these drugs and 32.8 % used these drugs. The difference is significant ( $P < 0.0002$ ).

**Table (20):**

Shows the use of antiprotozoal drugs in both persistent and acute diarrhea cases. It is revealed that 45 % of persistent cases and 34.3 % of acute cases used antiprotozoal drugs. The results is significant ( $P < 0.001$ ).

**Table (21):**

History of diarrhea episode in last 2 months in persistent and acute diarrhea cases 45.7 % of persistent cases and 52.8 % of acute cases had attacks of diarrhea in the last 2 months. The difference was insignificant ( $P = 0.397$ ).

**Table (22):**

History of diarrheal episodes more than 14 days in last 2 months in persistent and acute diarrhea cases. It is revealed that 25 % of persistent cases and 13.4 % of acute cases had attacks of diarrhea more than 14 days in the last 2 months. The difference was insignificant ( $P = 0.226$ ).

**Table (23):**

Shows history of diarrheal episodes in last 2 months in relation to nutritional status in persistent and acute cases. It is revealed that among the case of persistent diarrhea and had positive history of previous episodes 68.7 % were malnourished and 31.3 % were well nourished. While in cases of acute diarrhea with positive history of diarrheal episode 54.1 % were well nourished and 45.9 % were malnourished. The difference was insignificant ( $P = 0.102$ ).

**Table (24):**

Stool frequency in last 24 hours before coming in both persistent and acute diarrhea cases. The results are insignificant ( $P = 0.29$ ).

**Table (25):**

Mean of stool frequency in last 24 hours before coming in relation to persistent and acute diarrhea cases. It was  $7.37 \pm 3.76$  in persistent and  $7.2 \pm 3.33$  in acute. The results are insignificant ( $P = 0.379$ ).

**Table (26):**

Shows stool consistency in last 24 hours before coming in relation to persistent and acute cases 44.2 % of persistent cases had watery diarrhea while 74.3 % of acute cases had watery diarrhea. The results are significant ( $P < 0.001$ ).

**Table (27):**

Amount of stool in relation to persistent and acute cases 40 % of persistent cases and 48.6 % of acute cases had bulky stool. While 60 % of persistent cases and 51.4 % of acute cases had scanty stool. The result is insignificant ( $P < 0.31$ ).

**Table (28):**

Stool microscopic examination for protozoal and parasitic infestations in relation to persistent and acute cases. 24.3 % of persistent cases had parasitic infestations while 20 % of acute cases had parasitic infestation. The result is insignificant  $P = 0.49$ .

**Table (29):**

Show positive stool microscopic examination for protozoal and parasitic infestations in persistent and acute cases. In persistent diarrhea 23.5 % of the infestation were parasitic while 76.5 were protozoal while 7.1% cases of acute were parasitic and 92.9 were protozoal. It was insignificant ( $P = 0.22$ ).

**Table (30):**

Show protozoal infestation in persistent and acute cases of diarrhea. In persistent cases 30.8 % were due to *Giardia lamblia*, 61.5 % were due to *entamoeba* and 7.7 % were due to both while in acute diarrhea 46.2 % were due to *Giardia*, 38.5 were due to *entamoeba* and 15.3 % were due to both. The results were insignificant ( $P = 0.49$ ).

**Table (31):**

Shows fecal leukocyte in relation to persistent and acute cases. Fecal Leukocyte were present in 64.3 % of persistent cases and in 37.1 % of acute cases. The result was significant ( $P < 0.001$ ).

**Table (32):**

Shows stool pH in relation to acute and persistent cases. 27.1 % of cases of persistent diarrhea showed stool pH below



6 while 11.4 % of acute cases showed stool pH below 6. The difference was significant ( $P < 0.018$ ).

**Table (33):**

Shows mean stool pH in persistent and acute cases. In persistent cases mean stool pH was  $6.51 \pm 0.46$  while in acute it was  $6.77 \pm 0.41$ . The result was significant ( $P < 0.001$ ).

**Table (34):**

Shows stool reducing substance in relation to persistent and acute cases. 52.8 % of persistent cases showed positive reducing substances while 27.1 % of acute cases showed positive reducing substances. The results are significant ( $P < 0.001$ ).

**Table (35):**

Shows stool pH in relation to stool reducing substance in persistent and acute cases. In persistent cases with positive reducing substances 70.4 % of cases had pH below 6. In acute cases with positive reducing substances 25.9 % had pH below 6. The results are significant ( $P = 0.001$ ).

**Table (36):**

Shows the nutritional status in relation to stool pH in both persistent and acute cases. 68.4 % of the persistent diarrhea

cases with stool pH below 6 were malnourished while 12.5 % of the acute diarrheal cases with pH below 6 were malnourished. The results are significant ( $P = 0.023$ ).

**Table (37):**

Shows the nutritional status in relation to stool reducing substances in persistent and acute cases. 67.6 % of persistent diarrhea cases with positive stool for reducing substance were malnourished while 31.6 % of acute diarrhea cases with positive reducing substance were malnourished. The result was significant ( $P = 0.05$ ).

**Table (38):**

Shows stool pH in relation to feeding pattern in persistent and acute cases. Among the cases of who received the same feeding pattern as before diarrhea showed pH below 6. About 69.6 % were persistent while 30.4 % were acute while among cases who changed feeding either in quality or in quantity with stool pH below 6, 75 % were persistent below while 25 % were acute. The differences was significant  $P = 0.030$ .

**Table (39):**

Shows stool reducing substances in relation to feeding pattern in persistent and acute diarrhea cases. Among those

cases with diarrhea who received the same feeding as before and showing stool positive for reducing substances 65.6 % were persistent and 34.4 % were acute while among. Those cases with diarrhea and changed the feeding pattern either in quality or quantity and showed stool positive for reducing substances. 66.4 % were persistent while 33.6% were acute. The difference was significant ( $P = 0.009$ ).

***Table (40):***

Shows the different bacterial agents isolated from stool culture in both persistent and acute cases.

***Table (41):***

Showed the feeding pattern before and during illness in persistent diarrhea cases. It is revealed that 51.4 % of persistent diarrhea cases received the same feeding pattern as before.

***Table (42):***

Shows feeding pattern before and during illness in acute diarrhea cases. It is revealed that 60 % of acute diarrhea case received the same feeding as before.

*The results are shown in the following tables:*

**Table (1): Age distribution in persistent and acute diarrhea:**

Age (Months)	Persistent		Acute		Total	
	No.	%	No.	%	No.	%
< 6	13	18.6	13	18.6	26	18.6
6-12	40	57.1	34	48.6	74	52.8
> 12-18	9	12.9	18	25.7	27	19.3
> 18	8	11.4	5	7.1	13	9.3
Total	70	100	70	100	140	100

$$\chi^2 = 4.18 \quad P = 0.24 \quad (\text{Insignificant})$$

**Table (2): Age in persistent and acute diarrhea (Mean  $\pm$  SD):**

	Persistent	Acute
Mean age $\pm$ SD	11.5 $\pm$ 8.7	11.7 $\pm$ 8.6

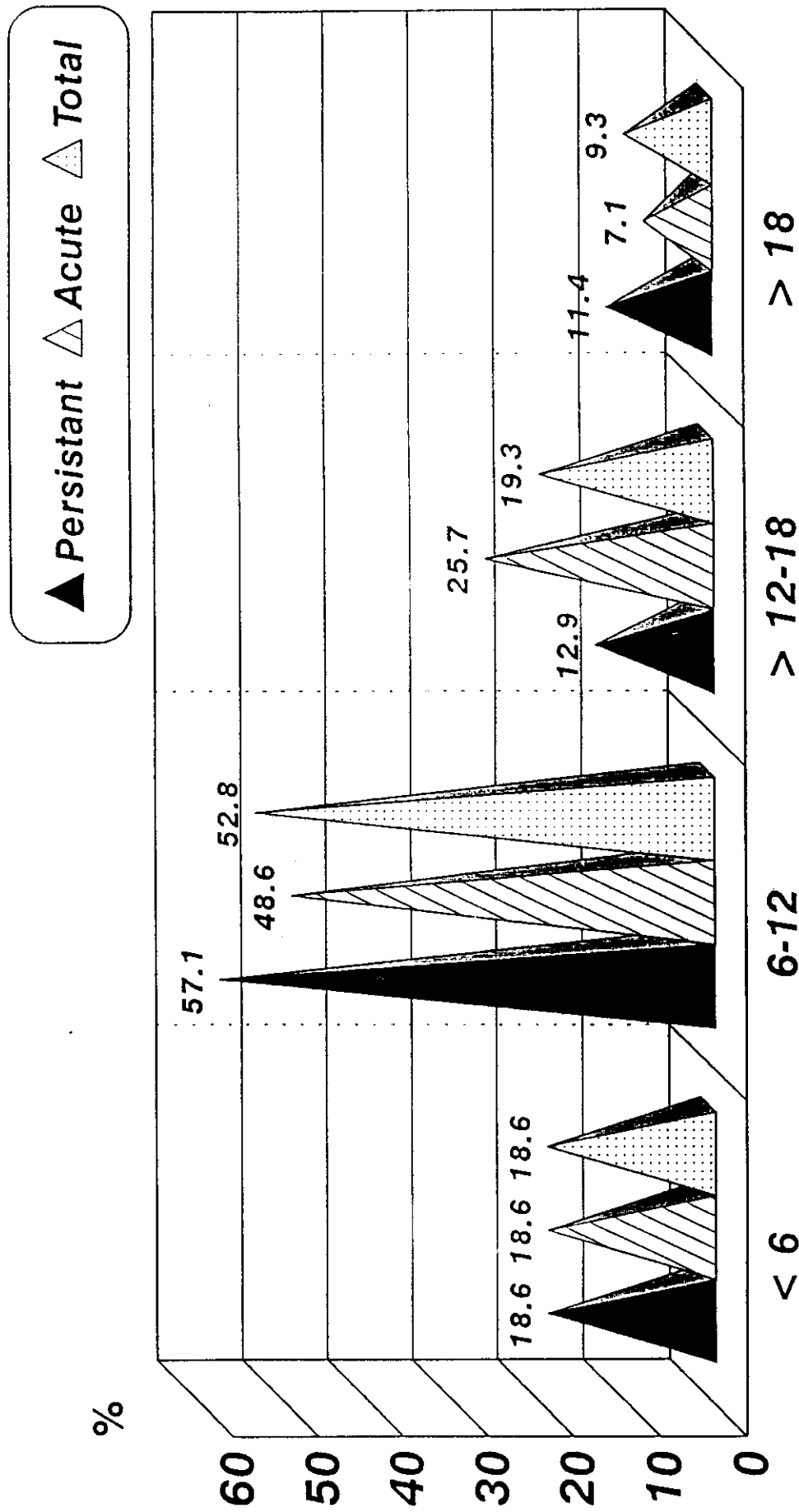
$$T = 0.127 \quad P = 0.45 \quad (\text{Insignificant})$$

**Table (3): Sex distribution in persistent and acute diarrhea:**

Sex	Persistent		Acute		Total	
	No.	%	No.	%	No.	%
Male	35	50	41	58.6	76	54.3
Female	35	50	29	41.4	64	45.7
Total	70	100	70	100	140	100

$$\chi^2 = 1.04 \quad P = 0.30 \quad (\text{Insignificant})$$

*Fig. (6): Age Distribution In Persistent & Acute Diarrhea*



*Fig. (7): Sex Distribution In Persistent & Acute Diarrhea*

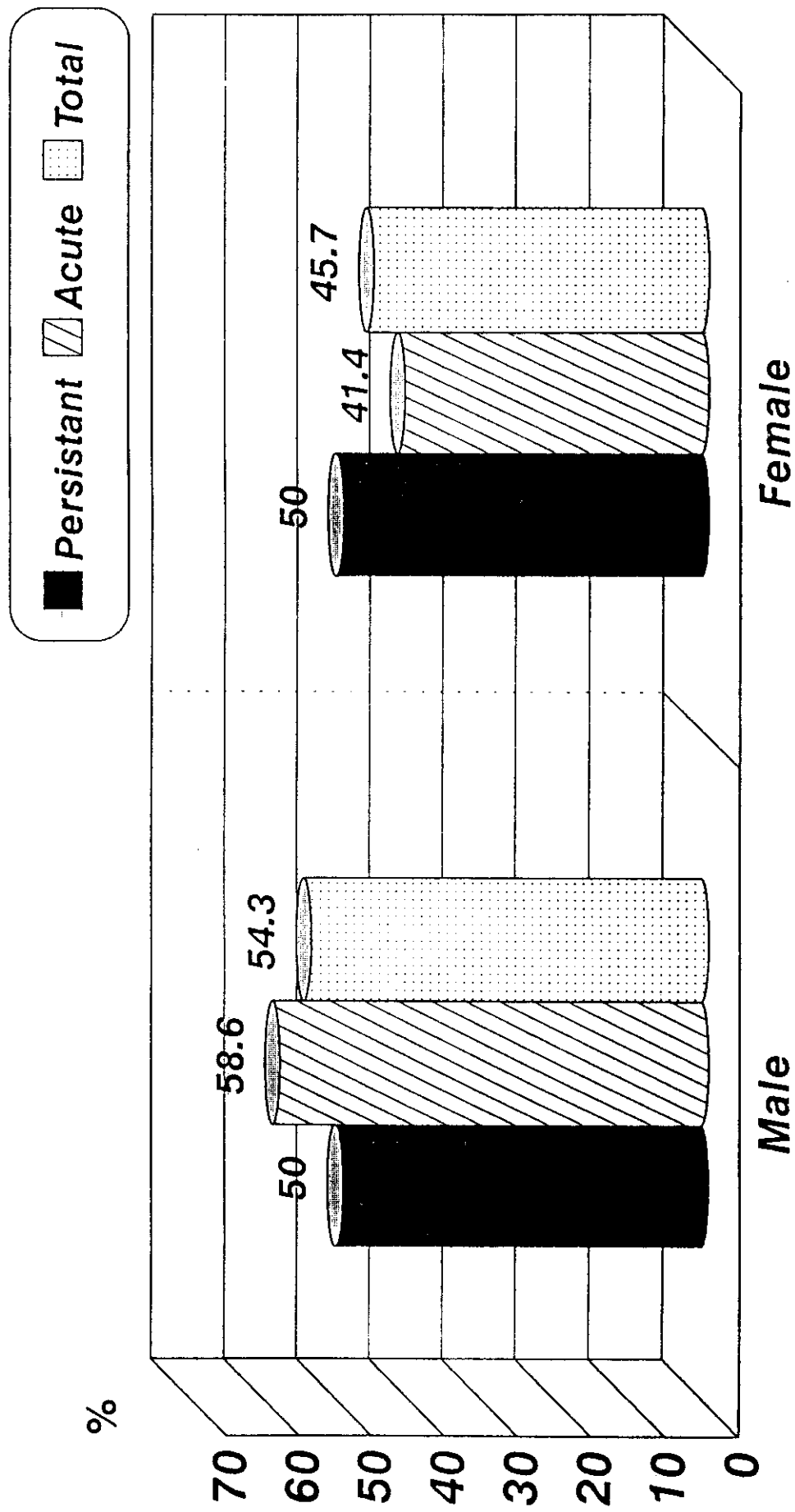


Table (4): *Nutritional status in relation to persistant and acute diarrhea:*

Nutritional Status	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Well Nut.	25	35.7	39	55.7	64	45.7
Mal Nut	45	64.3	31	44.3	76	54.3
Total	70	100	70	100	140	100

$$\chi^2 = 5.04 \quad P = 0.0175 \quad (\text{Significant})$$

Table (5): *Residence in relation to persistant and acute diarrhea:*

Residence	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Rural	52	74.3	51	72.8	103	73.6
Urban	18	25.7	19	27.1	37	26.4
Total	70	100	70	100	140	100

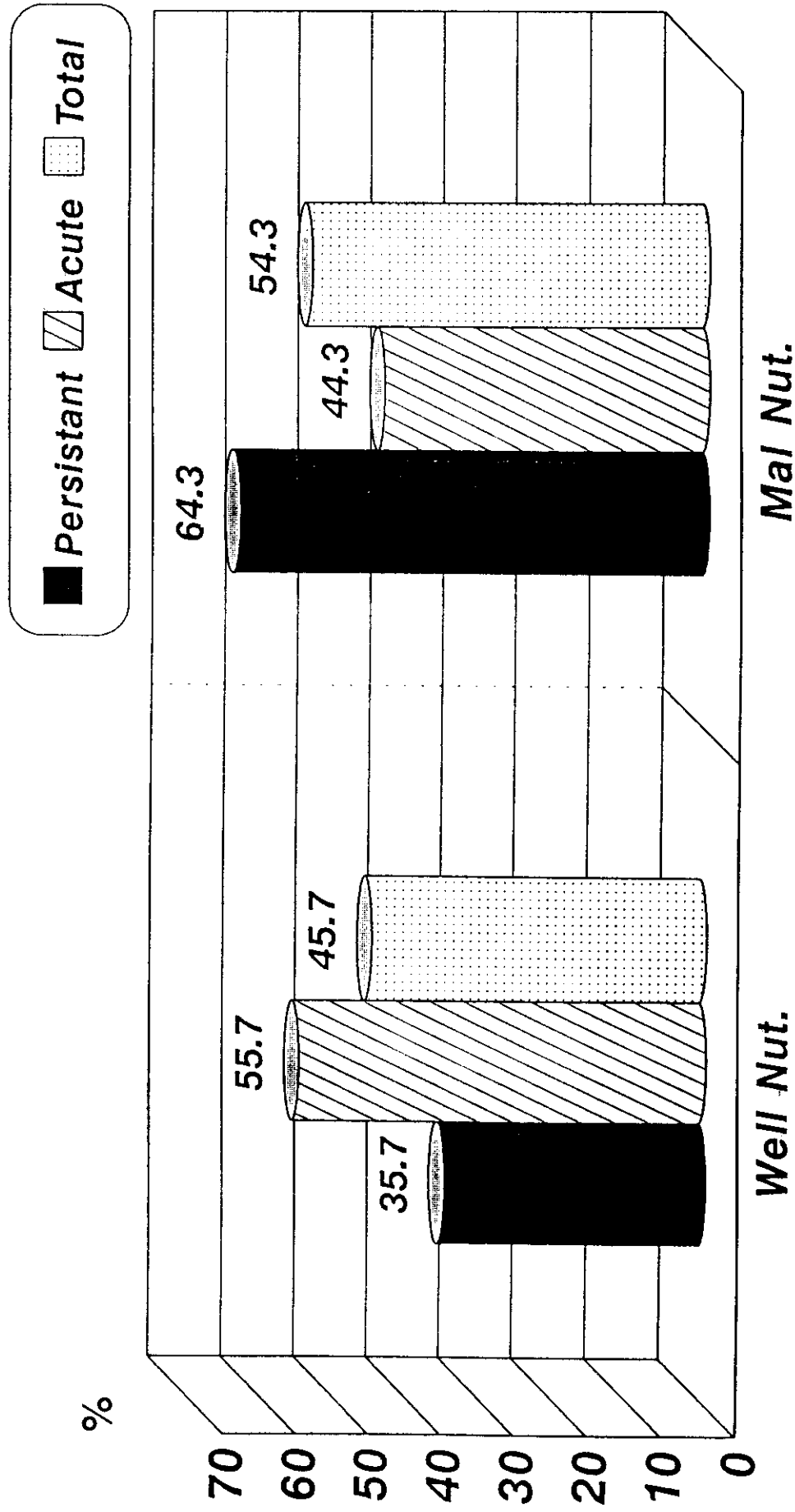
$$\chi^2 = 0.04 \quad P = 0.84 \quad (\text{insignificant})$$

Table (6): *Mothers education in persistant and acute diarrhea:*

Mothers Education	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Non-ed.	37	52.2	33	47.1	70	50.0
W/R	12	17.1	15	21.4	27	19.3
Second.	21	30.0	19	27.1	40	28.6
Higher	-	-	3	4.3	3	2.1
Total	70	100	70	100	140	100

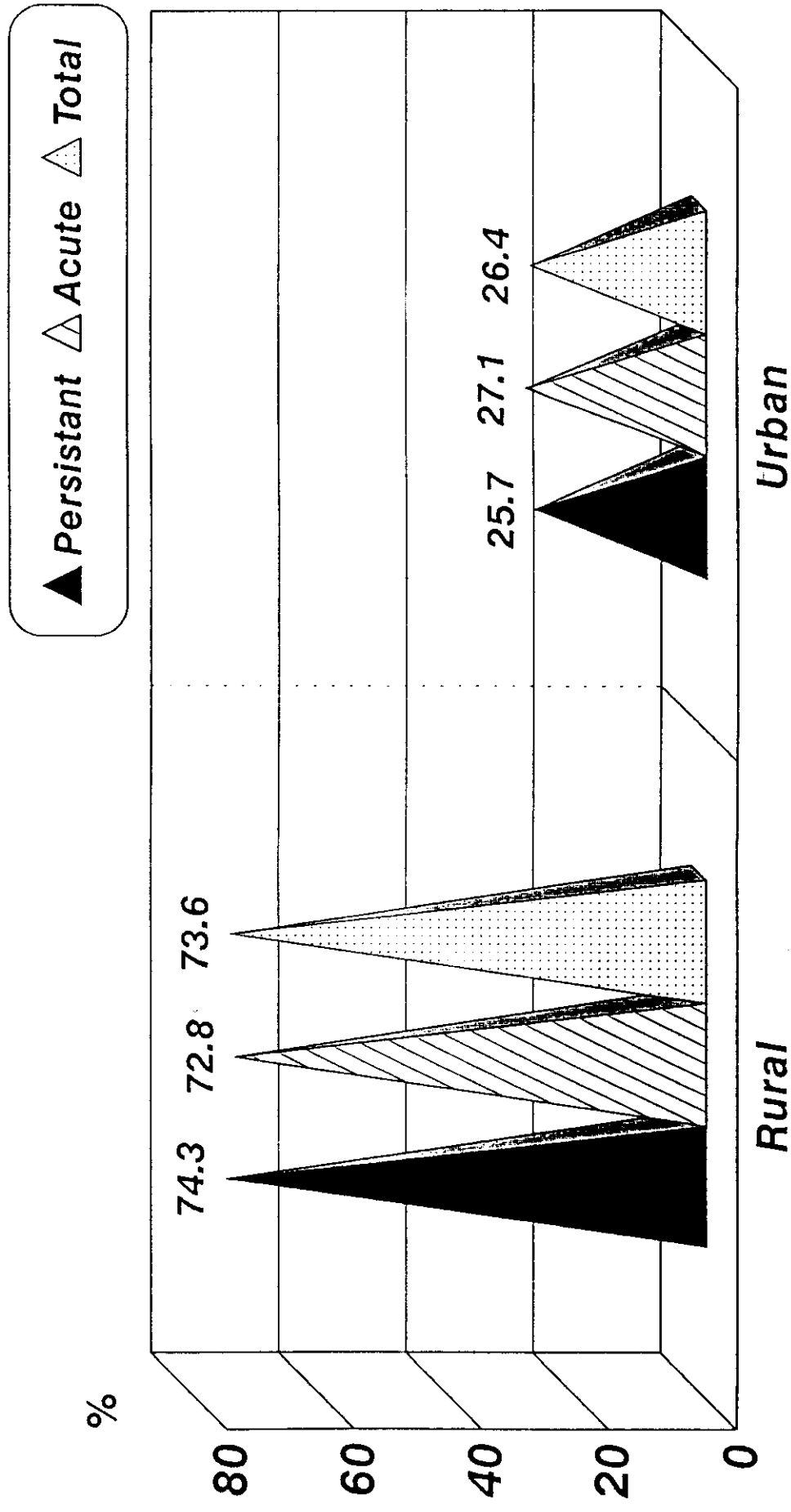
$$\chi^2 = 3.7 \quad P = 0.300 \quad (\text{Insignificant})$$

*Fig. (8): Nutritional Status In Relation To  
Persistant & Acute Diarrhea*

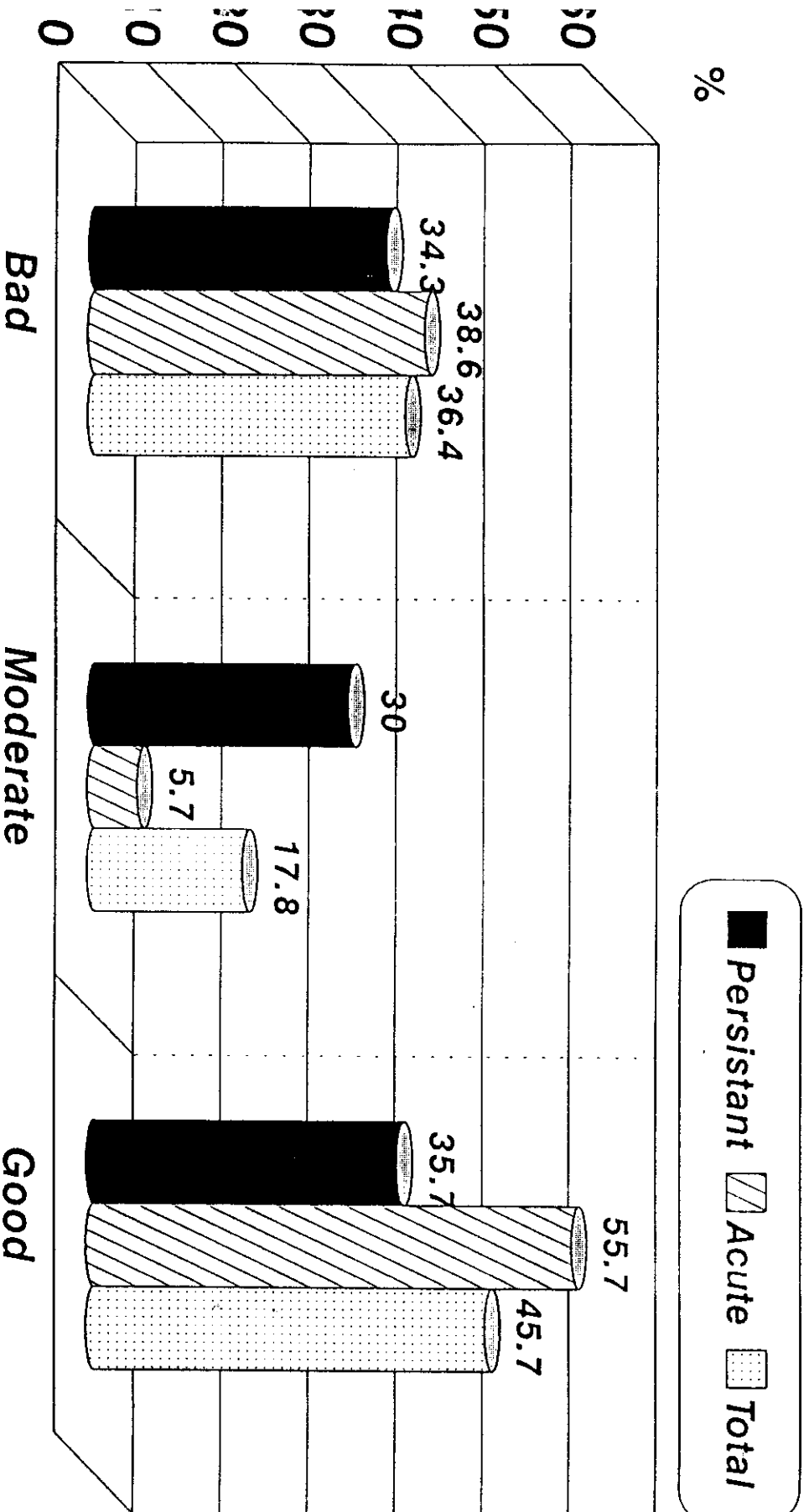




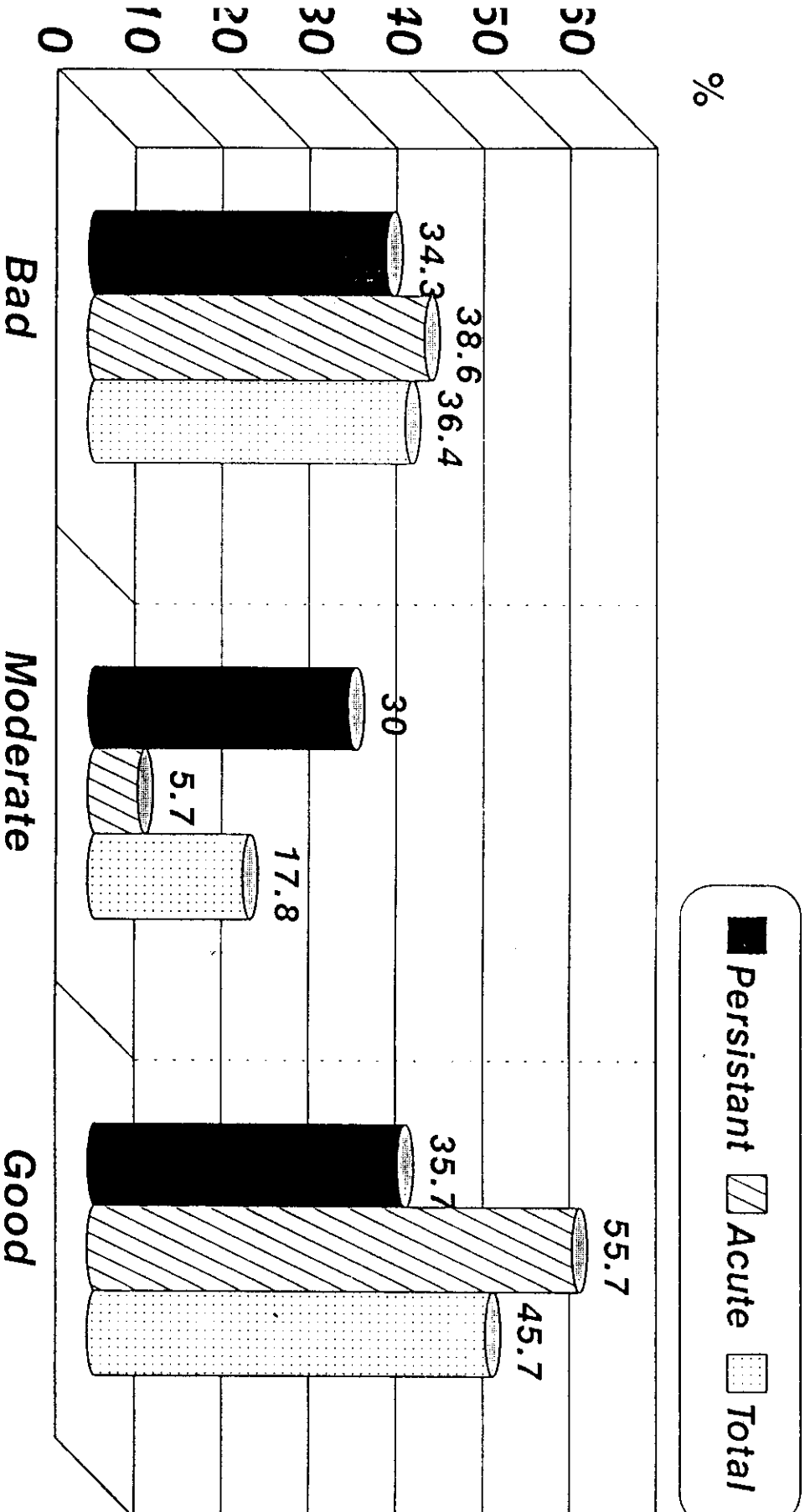
*Fig. (9): Residence In Relation To Persistent & Acute Diarrhea*



*Fig. (10): Housing Conditions In Relation To  
Persistant & Acute Diarrhea*



*Fig. (10): Housing Conditions In Relation To  
Persistant & Acute Diarrhea*



**Table (10): Mean number of house holdings in persistant and acute diarrhea (Mean  $\pm$  SD):**

	Persistant	Acute
Mean Number of house holdings $\pm$ SD	6.4 $\pm$ 2.7	5.2 $\pm$ 1.9

T = 3.129      P < 0.001      (Significant)

**Table (11): Feeding pattern before illness in persistant and acute diarrhea:**

Feeding Pattern	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Breast	19	27.1	26	37.1	45	32.1
Mixed	17	24.3	13	18.6	30	21.4
Artificial F.	24	34.3	21	30.0	45	32.1
Weaned	10	14.3	10	14.3	20	14.3
Total	70	100	70	100	140	100

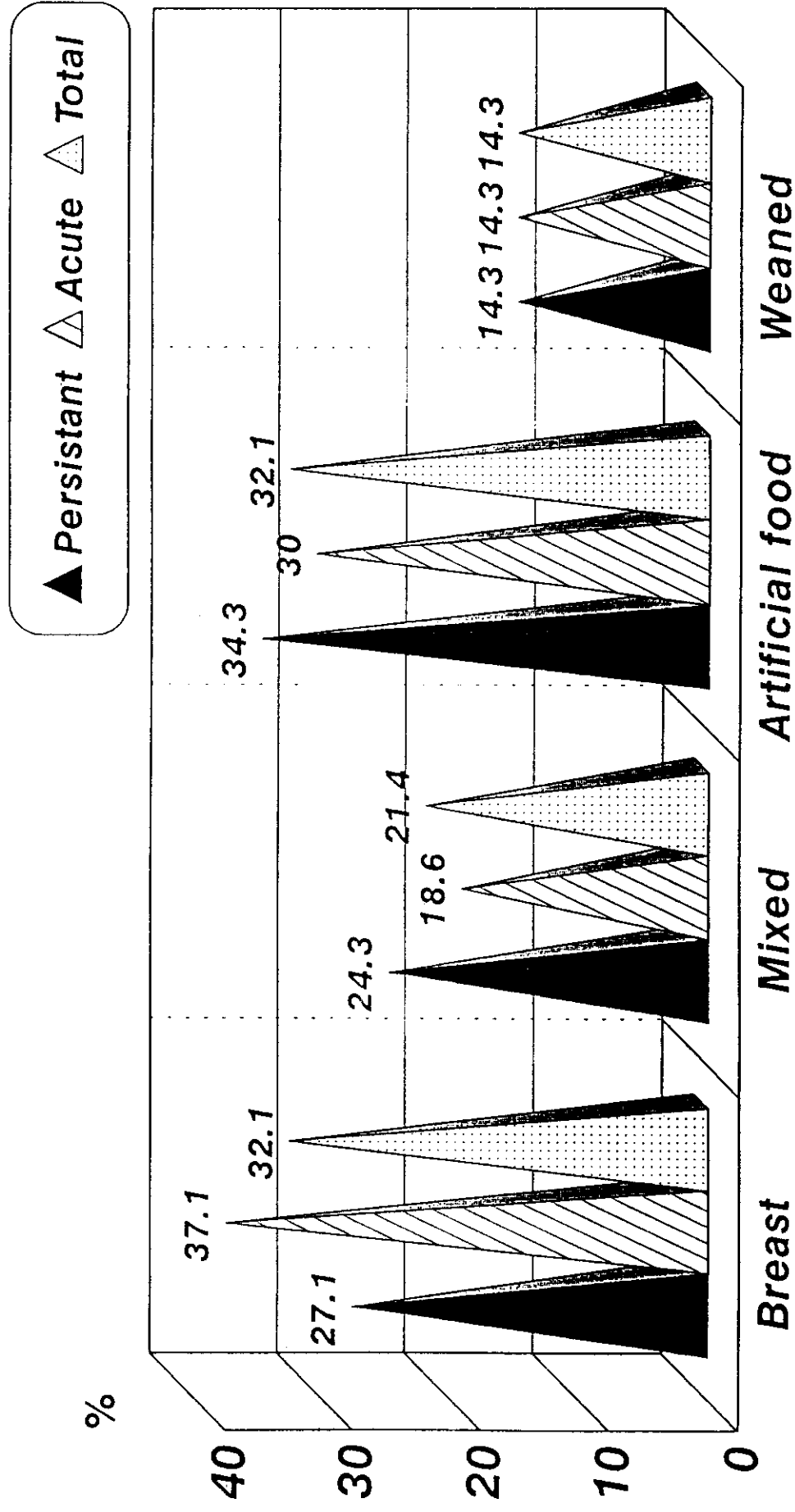
X<sup>2</sup> = 1.82      P = 0.61      (Insignificant)

**Table (12): Duration of breast feeding in months in relation to persistant and acute diarrhea (Mean  $\pm$  SD):**

	Persistant	Acute
Duration of breast feeding $\pm$ SD	7.06 $\pm$ 6.03	9.12 $\pm$ 5.53

T = 2.081      P = 0.020      (Significant)

**Fig. (11): Feeding Pattern Before Illness In  
Persistant & Acute Diarrhea**



**Table (13): Age (in months) of starting artificial feeding in persistant and acute diarrhea (Mean  $\pm$  SD):**

	Persistant	Acute
Age of starting ART $\pm$ SD	3.98 $\pm$ 3.45	4.697 $\pm$ 4.83

T = 0.792

P = 0.215

(Insignificant)

**Table (14): Age (in months) of starting weaning in persistant and acute diarrhea:**

Feeding Pattern	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Not started	19	27.1	22	31.4	41	29.3
< 4	6	8.6	2	2.8	8	5.7
4	13	18.6	12	17.1	25	17.8
5	7	10.0	7	10.0	14	10.0
6	10	14.3	11	15.7	21	15.0
7	15	21.4	18	25.7	38	27.1
Total	70	100	70	100	140	100

$\chi^2 = 2.6$

P = 0.78

(Insignificant)

**Table (15): Age (in months) of starting weaning in persistant and acute diarrhea (Mean  $\pm$  SD):**

	Persistant	Acute
Age of starting weaning $\pm$ SD	6.2 $\pm$ 3.99	7.5 $\pm$ 4.5

T = 1.549

P = 0.063

(Insignificant)

Table (16): *ORS administration:*

ORS	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Positive	54	77.1	43	61.4	97	69.2
Negative	16	22.9	27	38.6	43	30.8
Total	70	100	70	100	140	100

$\chi^2 = 4.06$        $P < 0.05$       (Significant)

Table (17): *Mean  $\pm$  SD of packets of ORS taken before coming:*

	Persistant	Acute
Mean $\pm$ SD of ORS packets	15.84 $\pm$ 2.7	5.83 $\pm$ 5.9

$T = 4.007$        $P < 0.0001$       (Significant)

Table (18): *Time of administration of ORS in persistant and acute diarrhea:*

Time	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
At onset	20	37.0	24	55.8	44	45.4
1st day	16	29.6	10	23.2	26	27.1
2nd day	10	18.5	6	13.9	16	16.5
Other	8	14.8	3	6.9	11	11.3
Total	54	100	43	100	97	100

$\chi^2 = 3.82$        $P = 0.28$       (Insignificant)

**Table (19): Antibiotics and sulfa drugs:**

Antibiotics & Sulfa	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Positive	27	38.6	23	32.8	50	35.7
Negative	25	35.7	41	58.6	66	47.1
Unknown	18	25.7	6	8.6	24	17.1
Total	70	100	70	100	140	100

$\chi^2 = 10.2$        $P < 0.001$       (Significant)

**Table (20): Antiprotozoal drugs:**

Antiprotozoal drugs	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Positive	32	45	24	34.3	56	40
Negative	20	28.6	40	57.1	60	42.8
Unknown	18	25.7	6	8.6	24	17.2
Total	70	100	70	100	140	100

$\chi^2 = 13.8$        $P < 0.001$       (Significant)

**Table (21): History of diarrheal episodes in last 2 months in persistant and acute cases:**

History of Diarrhea	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Positive	32	45.7	37	52.8	69	49.3
Negative	38	54.3	33	47.2	71	50.7
Total	70	100	70	100	140	100

$\chi^2 = 0.71$        $P = 0.397$       (Insignificant)



**Table (22): History of diarrheal episodes > 14 days duration in last 2 months in persistent and acute cases:**

History of Diarrhea	Persistent		Acute		Total	
	No.	%	No.	%	No.	%
< 7	24	75.0	32	86.6	56	81.2
> 14	8	25.0	5	13.4	13	18.8
Total	32	100	37	100	69	100

$$\chi^2 = 1.48$$

$$P = 0.226$$

(Insignificant)

**Table (23): History of diarrheal episodes in last 2 months in relation to nutritional status in persistent and acute cases:**

Nutritional Status	Persistent				Acute				Total	
	± ve history		-ve history		± ve history		-ve history		No.	%
	No.	%	No.	%	No.	%	No.	%		
Well-N.	10	31.2	15	39.5	20	54.1	19	57.6	64	45.7
Mal-N.	22	68.7	23	60.5	17	45.9	14	42.4	76	54.3
Total	32	100	38	100	37	100	33	100	140	100

$$\chi^2 = 6.2$$

$$P = 0.102$$

(Insignificant)

**Table (24): Stool frequency in last 24 hours before coming in relation to persistent and acute diarrhea:**

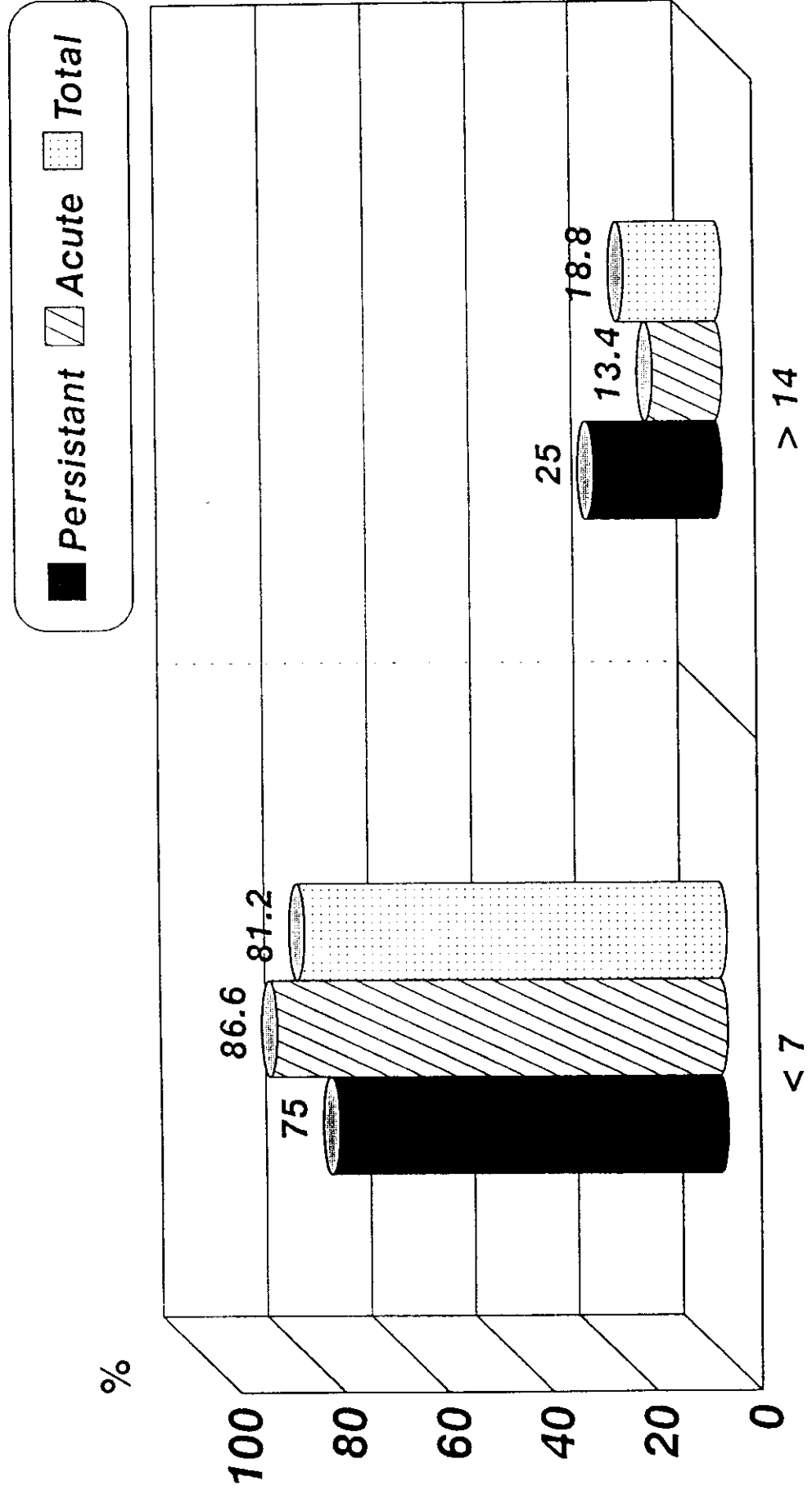
Stool Frequency	Persistent		Acute		Total	
	No.	%	No.	%	No.	%
2 - 6	33	47.1	40	57.1	73	52.1
> 6 - 12	30	42.8	25	35.7	55	39.3
> 12	7	10.0	5	7.1	12	8.5
Total	70	100	70	100	140	100

$$\chi^2 = 1.09$$

$$P = 0.29$$

(Insignificant)

*Fig. (15): History of Diarrheal Episodes > 14 days Duration In Persistent & Acute Cases*



**Table (25): Stool frequency in last 24 hours before coming in relation to persistant and acute diarrhea (Mean  $\pm$  SD):**

	Persistant	Acute
Stool frequency in last 24 hours $\pm$ SD	7.37 $\pm$ 3.76	7.2 $\pm$ 3.33

T = 0.308      P = 0.379      (Insignificant)

**Table (26): Stool consistency in last 24 hours before coming in relation to persistant and acute cases:**

Stool Consistency	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Watery	31	44.2	52	74.3	83	59.3
Loose	39	55.8	18	25.7	57	40.7
Total	70	100	70	100	140	100

$X^2 = 13.1$       P < 0.001      (Significant)

**Table (27): Appearance amount of stool in relation to persistant and acute cases:**

Stool consistency	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Bulky	28	40.0	34	48.6	62	44.3
Scanty	42	60.0	36	51.4	78	55.7
Total	70	100	70	100	140	100

$X^2 = 1.04$       P < 0.31      (Insignificant)

**Table (28): Stool M/E for protozoal and parasitic infestation in relation to persistant and acute cases:**

Stool M/E	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Negative	53	75.7	56	80.0	109	77.8
positive	17	24.3	14	20.0	31	22.2
Total	70	100	70	100	140	100

$\chi^2 = 1.4$        $P = 0.49$       Insignificant.

**Table (29): Positive stool M/E for protozoal and parasitic infestation in persistant and acute cases:**

Positive Stool M/E	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Parasites	4*	23.5	1**	7.1	5	16.1
Protozoal	13	76.5	13	92.9	26	83.9
Total	70	100	70	100	140	100

$\chi^2 = 1.5$        $P = 0.22$       Insignificant.

\* (2 H. Nana, 1 ascaris, and 1 strengloid ova).

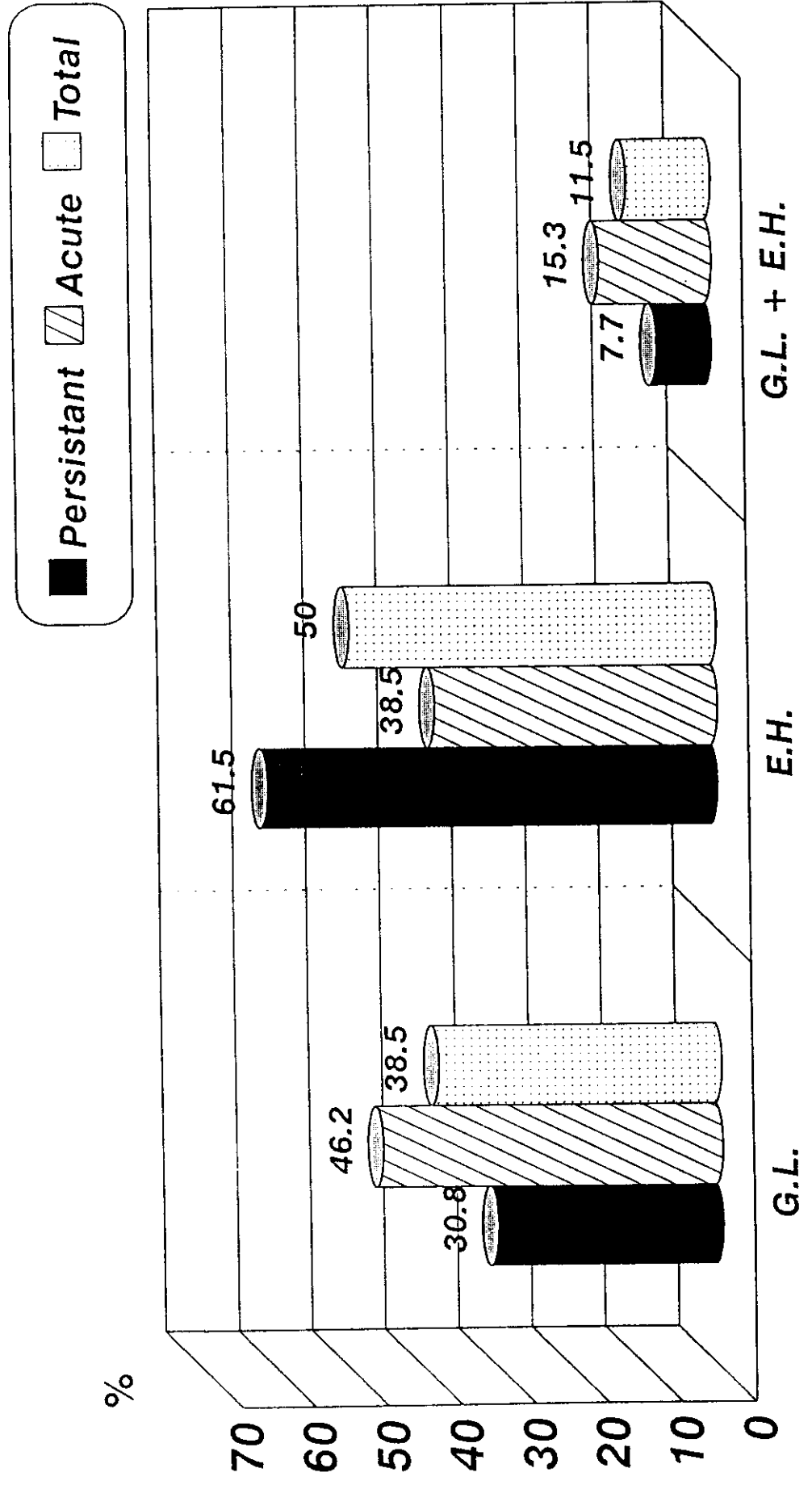
\*\* (Ascaris ova).

**Table (30): Protozoal infestation in persistant and acute cases:**

Positive Stool M/E	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
G.L.	4	30.8	6	46.2	10	38.5
E.H.	8	61.5	5	38.5	13	50.0
G.L. $\pm$ E.H.	1	7.7	2	15.3	3	11.5
Total	13	100	13	100	26	100

$\chi^2 = 1.43$        $P = 0.49$       Insignificant.

**Fig. (16): Protozoal Infestation In Persistent & Acute Cases**



**Table (31): Fecal leukocytes in relation to persistant and acute cases:**

Fecal Leukocytes	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Present	45	64.3	26	37.1	71	50.7
Absent	25	35.7	44	62.9	69	49.3
Total	70	100	70	100	140	100

$X^2 = 10.32$        $P < 0.001$       (Significant)

**Table (32): Stool pH in relation to persistant and acute cases:**

Stool pH	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
< 6	19	27.1	8	11.4	27	19.3
> 6	51	72.9	62	88.6	113	80.7
Total	70	100	70	100	140	100

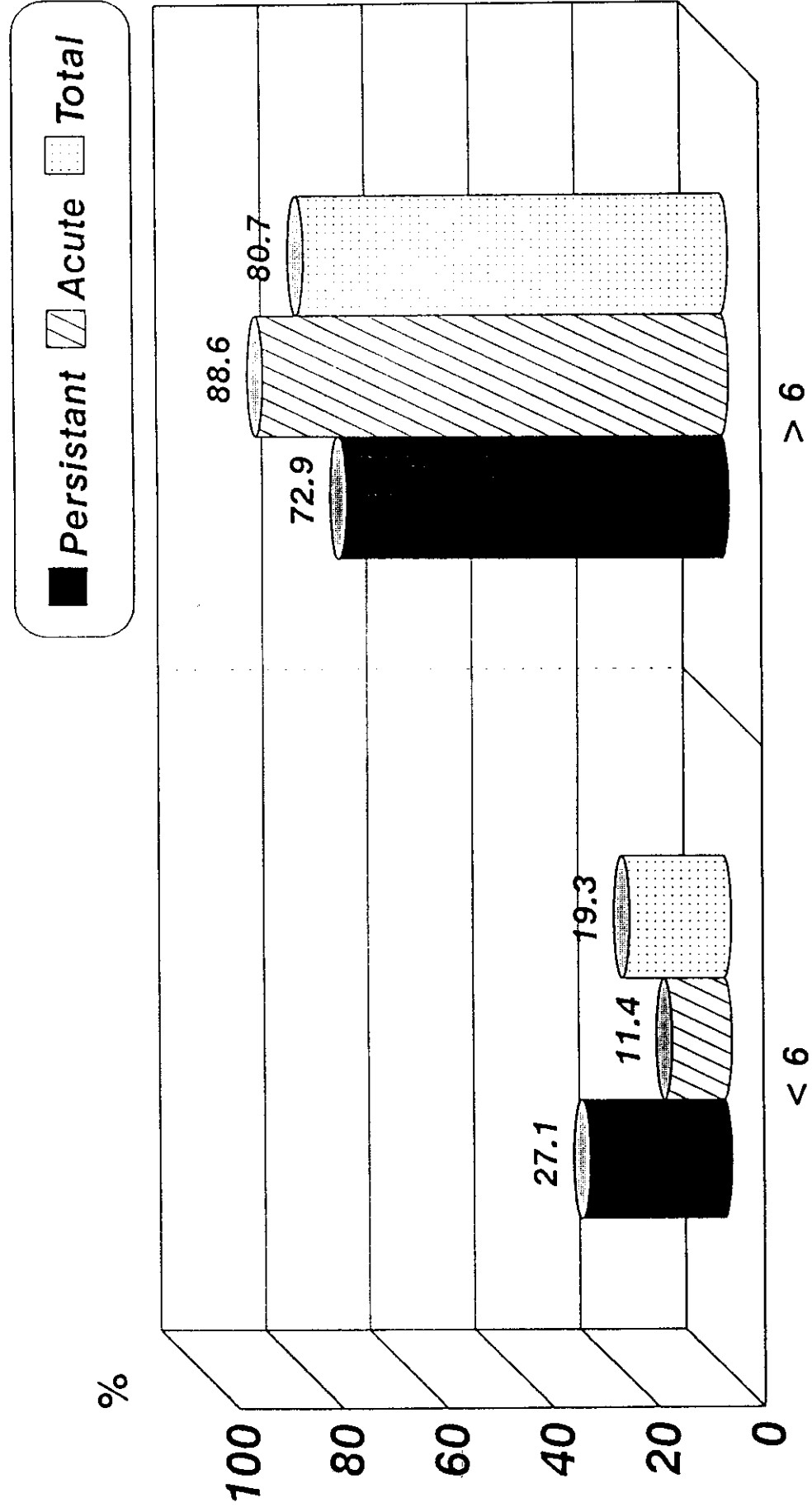
$X^2 = 5.55$        $P < 0.018$       (Significant)

**Table (33): Stool pH in relation to persistant and acute cases (Mean  $\pm$  SD):**

	Persistant	Acute
Stool pH $\pm$ SD	6.51 $\pm$ 0.46	6.77 $\pm$ 0.41

$T = 3.483$        $P < 0.001$       (Significant)

*Fig. (17): Stool pH In Relation To Persistent & Acute Cases*



**Table (34): Stool reducing substance in relation to persistant and acute cases:**

Stool Reducing S.	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
Positive	37	52.8	19	27.1	56	40.0
Negative	33	47.2	51	72.9	84	60.0
Total	70	100	70	100	140	100

$$X^2 = 9.6$$

$$P < 0.001$$

(Significant)

**Table (35): Stool pH in relation to stool reducing substance in persistant and acute cases:**

Stool pH	Persistant				Acute				Total	
	± ve reducing Substance		-ve reducing Substance		± ve reducing Substance		-ve reducing Substance			
	No.	%	No.	%	No.	%	No.	%	No.	%
< 6	19	70.4	0	0.0	7	25.9	1	3.7	27	100
> 6	18	15.9	33	29.2	12	10.6	50	44.3	113	100
Total	37	26.4	33	23.6	19	13.6	51	36.6	140	100

$$X^2 = 45.9$$

$$P = 0.001$$

(Significant)

**Table (36): Nutritional status in relation to stool pH in persistant and acute cases:**

Nutritional Status	Persistant				Acute				Total	
	< 6		> 6		< 6		> 6			
	No.	%	No.	%	No.	%	No.	%	No.	%
Well-N.	6	31.6	19	37.2	7	87.5	32	51.6	64	45.7
Mal-N.	13	68.4	32	62.8	1	12.5	30	48.4	76	54.3
Total	19	100	51	100	8	100	62	100	140	100

$$X^2 = 9.5$$

$$P = 0.023$$

(Significant)



**Table (37): Nutritional status in relation to stool reducing substance in persistant and acute cases:**

	Persistant				Acute					
Nutritional Status	± ve reducing Substance		-ve reducing Substance		± ve reducing Substance		-ve reducing Substance		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Well-N.	12	32.4	13	39.4	13	68.34	26	51.0	64	45.7
Mal-N.	25	67.6	20	60.6	6	31.6	25	49.0	76	54.3
Total	37	100	33	100	19	100	51	100	140	100

$$X^2 = 7.68$$

$$P = 0.05$$

(Significant)

**Table (38): Stool pH in relation to feeding pattern in persistant and acute cases:**

Cases	Same as before without changes				Quantity or quality during illness				Total	
	< 6		> 6		< 6		> 6			
	No.	%	No.	%	No.	%	No.	%	No.	%
Persistant	16	69.6	20	36.4	3	75.0	31	53.3	70	50.0
Acute	7	30.4	35	63.6	1	25.0	27	46.6	70	50.0
Total	23	100	55	100	4	100	38	100	140	100

$$X^2 = 8.89$$

$$P = 0.030$$

(Significant)

**Table (39): Stool reducing substance in relation to feeding pattern in persistant and acute cases:**

Cases	Same as before without changes				Quantity or quality during illness				Total	
	± ve reducing Substance		-ve reducing Substance		± ve reducing Substance		-ve reducing Substance			
	No.	%	No.	%	No.	%	No.	%	No.	%
Persistant	21	65.6	15	32.6	16	66.4	18	47.4	70	50.0
Acute	11	34.4	31	67.4	8	33.6	20	52.6	70	50.0
Total	32	100	46	100	24	100	38	100	140	100

$$X^2 = 11.46$$

$$P = 0.009$$

(Significant)

Table (40): *Stool cultures in persistant and acute cases:*

Stool Cultures	Persistant		Acute		Total	
	No.	%	No.	%	No.	%
E. Coli	52	74.27	63	89.99	115	82.14
K. pn	6	8.57	-	0.00	6	4.29
Salmonella	3	4.29	-	0.00	3	2.15
Staph. aureus	1	1.43	-	0.00	1	0.71
Erwinia sp.	1	1.43	-	0.00	1	0.71
Staph. Sensania	-	0.00	1	1.43	0	0.71
E. vulnaris	1	1.43	1	1.43	2	1.44
Citrobacter frecondi	1	1.43	-	0.00	1	0.71
K. oxytica	1	1.43	-	0.00	1	0.71
Sennatia odorifera	1	1.43	1	1.43	2	1.44
Kaluyvera ascorbata	1	1.43	1	1.43	2	1.44
Pasturela multcida	-	0.00	1	1.43	1	0.71
Hafnia alvei	1	1.43	-	0.00	1	0.71
Shigella	-	0.00	1	1.43	1	0.71
Enterobacter agglomerans	1	1.43	-	0.00	1	0.71
No growth	-	0.00	1	1.43	1	0.71
Total	70	100.0	70	100.0	140	100.0

Table (41): *Feeding pattern before and during illness in persistant cases:*

Feeding  before illness	Persistant				Total	
	Same as before illness		Same with quan. & qual.			
	No.	%	No.	%	No.	%
Breast F.	14	73.7	5	26.3	19	100
Artificial F.	9	37.5	15	62.5	24	100
Mixed	7	41.2	10	58.8	17	100
Weaned	6	60.0	4	40.0	10	100
Total	36	51.4	34	48.6	70	100

$$\chi^2 = 6.64$$

$$P = 0.08$$

Insignificant.

**Table (42): Feeding pattern before and during illness in acute cases:**

Feeding before illness	Acute				Total	
	Same as before illness		Same with quan & qual.			
	No.	%	No.	%	No.	%
Breast F.	17	65.4	9	34.6	26	100
Artificial F.	10	47.6	11	52.4	21	100
Mixed	8	61.5	5	38.5	13	100
Weaned	7	70.0	3	30.0	10	100
Total	42	60.0	28	40.0	70	100

$\chi^2 = 2.08$        $P = 0.55$       Insignificant.

**Table (43): Prognosis of persistent and acute diarrhea:**

Prognosis	Persistent		Acute		Total	
	No.	%	No.	%	No.	%
Improved	62	88.6	65	92.9	127	90.7
Not improved	8*	11.4	5**	7.1	13	9.3
Total	70	100	70	100	140	100

$\chi^2 = 0.76$        $P = 0.38$       (Insignificant)

\* 8 cases died

\*\* 5 cases were not improved