

Assessing the quality of life in chronic kidney disease patients on haemodialysis using KDQOL (SF- 36 v1.2 Health Survey)

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ABSTRACT

Background: The aim of the study is to assess the quality of life in patients with CKD on haemodialysis more than three months at a community hospital and also identify characteristics that may be associated with their worsening quality of life. **Material and Methods:** The cross-sectional study was conducted at the in-patient department (IPD) of a community hospital. This study included 39 CKD patients and used a systematic random sampling method for quantitative analysis. This study utilized a short form KDQoL SF-36(v1.2) questionnaire to assess HRQoL in CKD patients. Data were collected, analysed by frequency table, percentage analysis, statistical significance test was done using SPSS, chi-square test. **Results and Discussion:** Among thirty-nine patients, 62% were male 38% were female. The age distribution among the selected samples 18% were below 50years, 82% were above 50years. This study gives positive outcome compared between the patients physical and emotional health problems, in this 66.7% had emotional problem such as feeling depressed or anxious affect the physical health accomplished less in regular daily activities (P=.010), 60% had both emotional and physical accomplished less in regular activities(P=.03), 72.2% had emotional problems which cut down the amount of time spent on work affect the physical health were limited in the kind of work(P<.001), 72.2% had physical health limited in the kind of work affect accomplished less due to emotional problems (P<.001), 77.8% had physical problems limited in the kind of work due to affect emotional problems did your work or activities less carefully than usual(P=.003), 75% had body pain during the past 4 week and how much did pain interfere with your normal work (P<.001),40% were said in this statement my health is excellent and I am as healthy as anybody I know (P=.004) **Conclusion:** The findings of the study demonstrated that there was a significant decrease in HRQoL in CKD Patients and it also revealed CKD imposes various restrictions on patients physical and mental functioning. Timely interventions to improve HRQoL can significantly benefit patient health.

Keywords: In-Patient Department (IPD), chronic kidney disease (CKD), Health – Related Quality of Life (HRQoL).

INTRODUCTION:

Chronic kidney disease (CKD) is a diverse condition where kidney functions is reduced at various levels, starting from a state of risk or damage and progressing through mild, moderate, and severe stages of chronic kidney failure (1). CKD has grown to be an enormous burden on the world's healthcare system (2) and is now understood to pose a serious risk to people's quality of life (QoL) as the conditions advances (3). Over 800 million people globally, or 10% of the overall population, are afflicted by chronic kidney disease (4). Patients with CKD have a lower QoL, more symptoms, and greater psychological distress, and the degree of these changes is adversely linked with GFR (5,6). End -stage renal disease patients scored lower on the HRQoL scale than the general population (7). The KDQoL guideline suggests routine measurements to evaluate the quality of treatment provided to hemodialysis patients and recognizes HRQoL as a fundamental outcome (8). In India, the prevalence of CKD has been recorded as 17.2%, of which 6% have stage 3 or more severe CKD (9).

AIM AND OBJECTIVE:

The aim of the study is to assess the quality of life in patients with CKD on haemodialysis more than three months at a community hospital and also identify characteristics that may be associated with their worsening quality of life.

MATERIAL AND METHODS:

The cross-sectional study was conducted at the in-patient department (IPD) of a community hospital. This study included 39 CKD patients and used a systematic random sampling method for quantitative analysis. This study utilized a short form KDQoL SF-36(v1.2) questionnaire to assess HRQoL in CKD patients. Data were collected, analysed by frequency table, percentage analysis, statistical significance test was done using SPSS, chi-square test.

INCLUSION CRITERIA:

Age above 18years, diagnosed with CKD

Age up to 85years (Both male and Female)

CKD patients on dialysis for more than 3 months

CKD patient with other co morbidities and are in hemodialysis more than three months

EXCLUSION CRITERIA:

CKD patients not on Hemodialysis

Age above 85years (Both male and Female)

CKD patients below three months on hemodialysis

Patient not willing for study & too ill

STUDY PROCEDURE:

Patients who attend an IPD at the nephrology unit were requested to complete the SF 36. Several patients were unable to complete the SF 36 (v1.2) on their own; their responses were recorded by the research investigator via proper consultation with the patients. A self-administered tool called the KDQoL SF-36 (v1.2) questionnaire was employed to assess general Health – Related Quality of Life, which is not illness – or treatment specific.

In this study, we have utilized KDQoL SF-36 (v1.2). The whole questionnaire is included as a supplement (Supplementary Materials). The SF-36 questionnaire is widely utilized and accepted in a wide range of contexts, enabling comparisons both within and between conditions. The recommendations of the National Kidney Foundation stress the need for the questionnaire to be reliable and accurate.

ETHICAL CONSIDERATIONS:

The institutional ethics committee thoroughly reviewed the research proposal, assessing factors such as informed consent procedures, participant privacy and confidentiality, potential risks and benefits, and compliance with relevant laws and regulations. Patient's rights were respected and maintained. The concerned institutional Ethics Committee has approved this study.

STATISTICAL ANALYSIS:

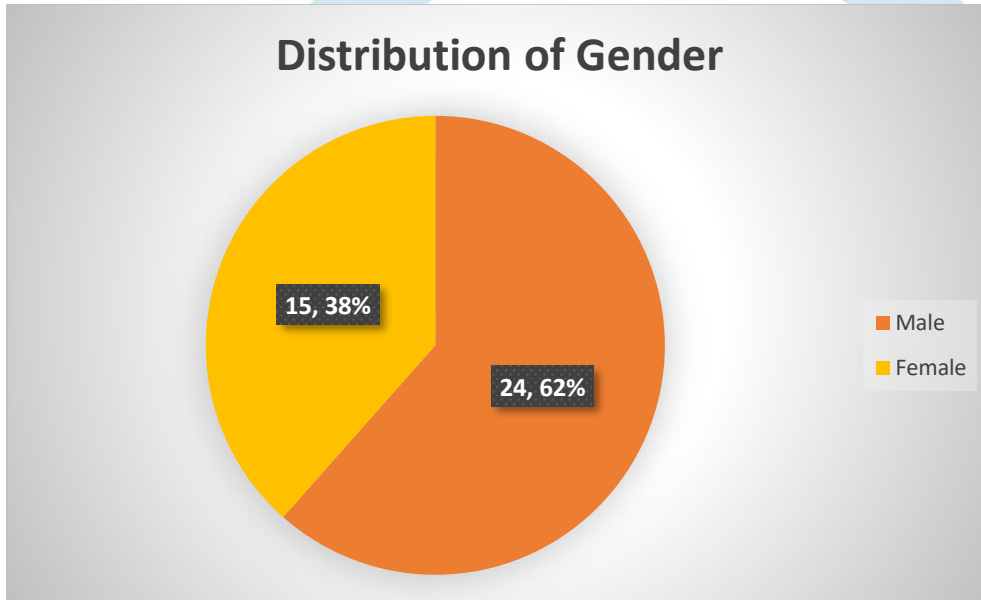
Descriptive statistics including frequency, percentages, mean and standard deviation were used to summarize the baseline sociodemographic data and clinical characteristics of the patients. For categorical data, the chi-square test was used, and one way SPSS was used to assess the continuous variables based on the stages of CKD. Pearson correlation was utilized to evaluate the relationship between dimensions of SF-36 and different covariates. Statistics are deemed significant with p values under 0.05.

RESULTS & DISCUSSION:

The results and discussions of the present study was consolidated, tabulated and figured under the following headings:

A. Description of Demographic Data:**A1. Distribution of Gender:****Table -1**

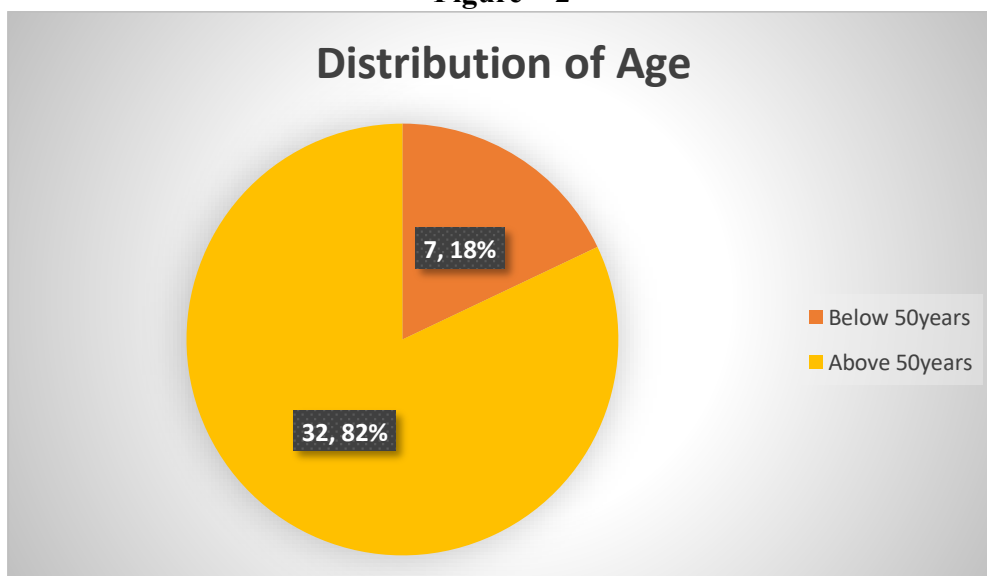
Gender	Number	Percentage
Male	24	62%
Female	15	38%
Total	39	100%

Figure - 1

The above table 1 and Figure 1 reveals the gender distribution of the selected samples. 62% of the samples were male, 38% of the samples were female. The majority of the selected samples were from male.

A2. Distribution of Age:**Table - 2**

Age Factor	Number	Percentage
Below 50years	7	18
Above 50years	32	82
Total	39	100%

Figure - 2

The above table 2 and figure 2 reveals the age distribution of the selected samples. 18% of samples were below 50years, 82% samples were above 50years. The majority of the samples were from above 50years.

Based on KDOoL SF36 Version1.2

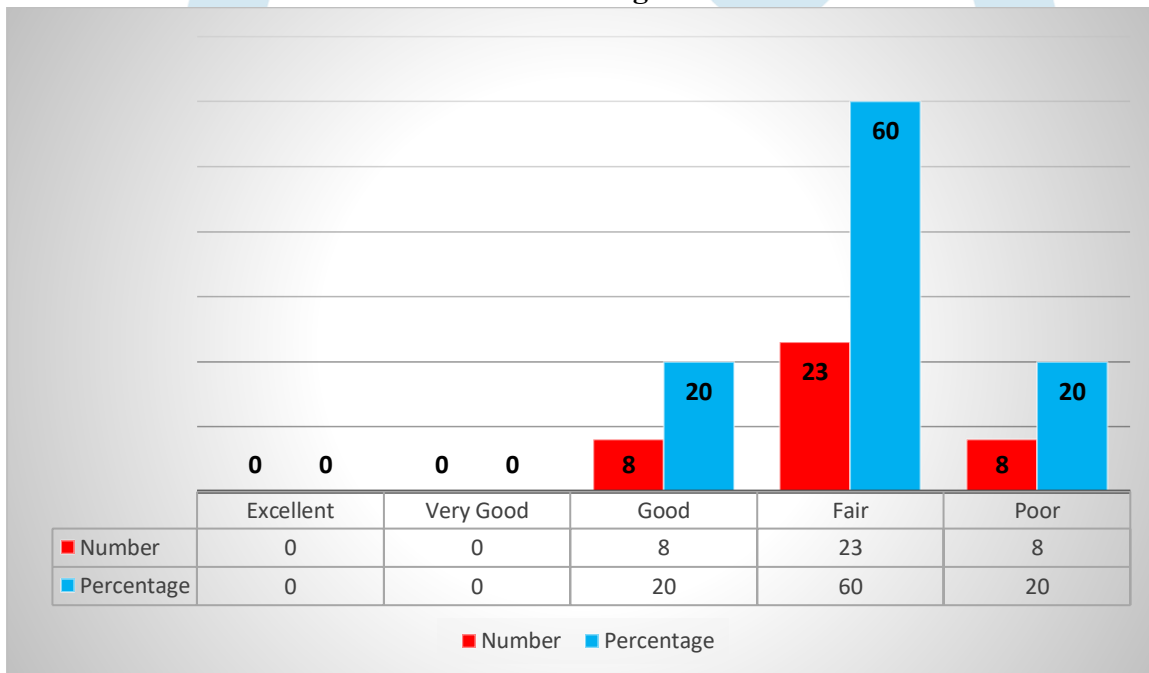
Q1. GENERAL HEALTH:

In general, would you say your health is:

Table - 3

Valid	Scoring	Number	Percentage
Excellent	0	0	0
Very Good	1	0	0
Good	2	8	20%
Fair	3	23	60%
Poor	4	8	20%
	Total	39	100%

Figure – 3



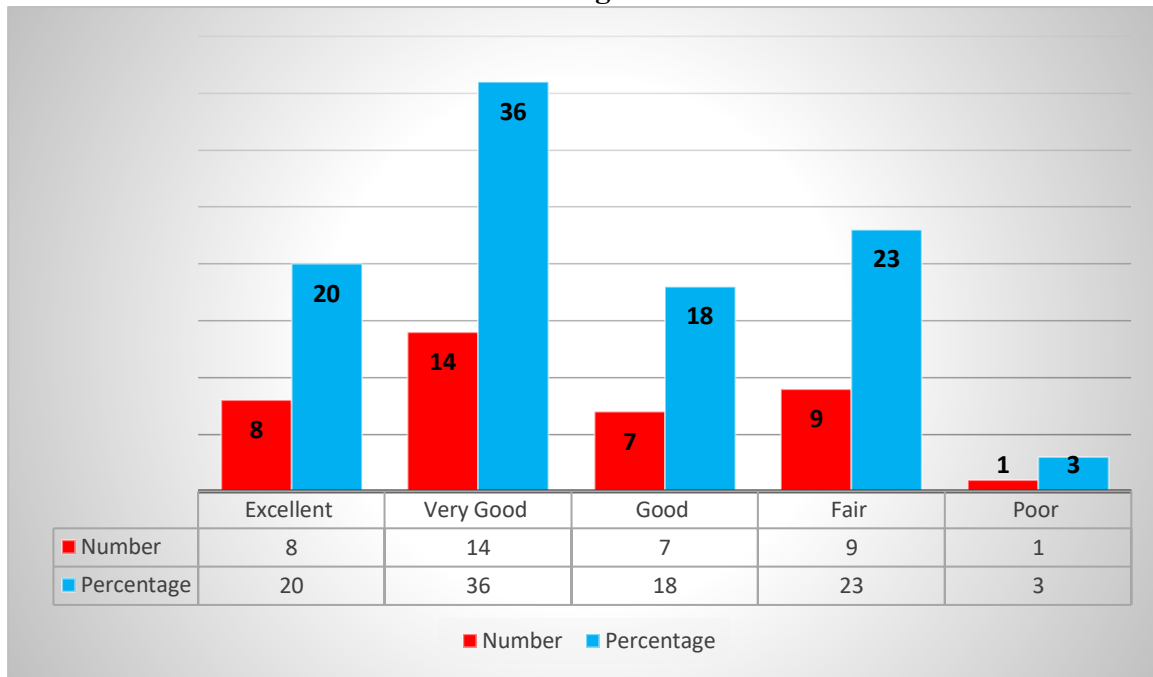
The above table 3 and figure 3 reveals the general health of the selected samples. 20% of the selected samples were said good, 80% of the selected sample were said fair, 20% of the selected sample were said poor. The majority were said fair.

Q2. Compared to one year ago, how would you rate your health in general now?

Table - 4

Valid	Scoring	Number	Percentage
Excellent	0	8	20%
Very Good	1	14	36%
Good	2	7	18%
Fair	3	9	23%
Poor	4	1	3%
	Total	39	100%

Figure - 4



The above table 4 and figure 4 reveals the general health compare one year ago of the selected samples. 20% of the selected samples were said excellent, 36% of the selected sample were said very good, 18% of the selected sample were said good, 23% of the selected sample were said fair, 3% of the selected sample were said poor. The majority were said very good.

Q3. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

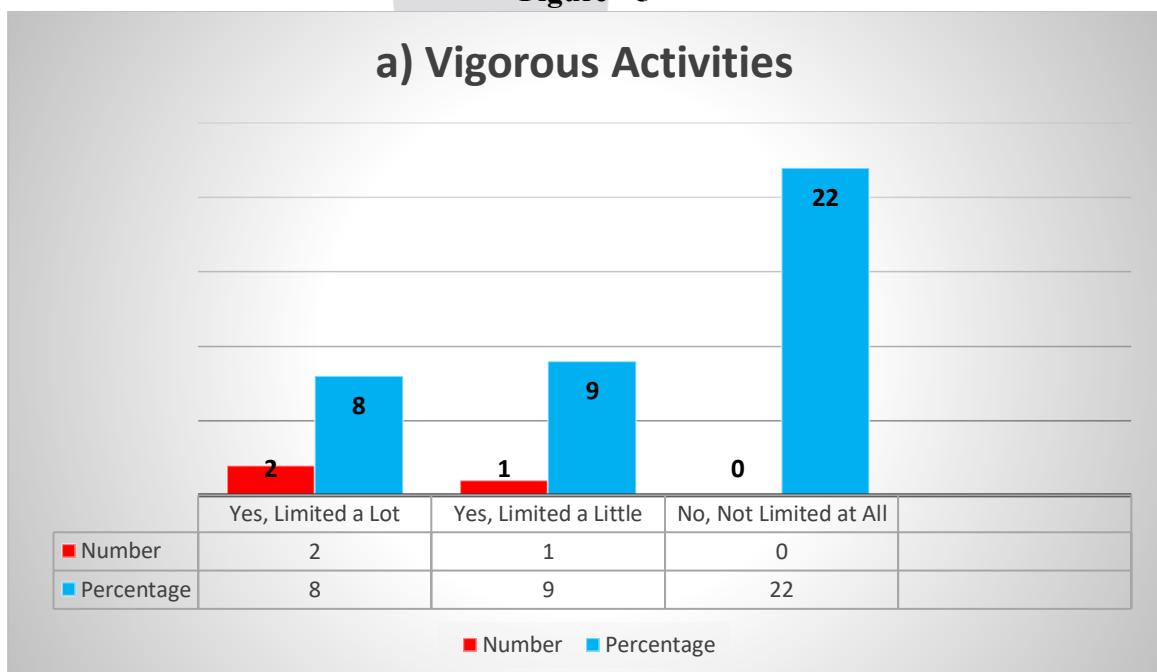
a) Vigorous Activities

Vigorous activities, such as running, lifting heavy objects, participating in strenuous activities.

Table - 5

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	8	21%
Yes, Limited a Little	1	9	23%
No, Not Limited at All	0	22	56%
	Total	39	100%

Figure - 5



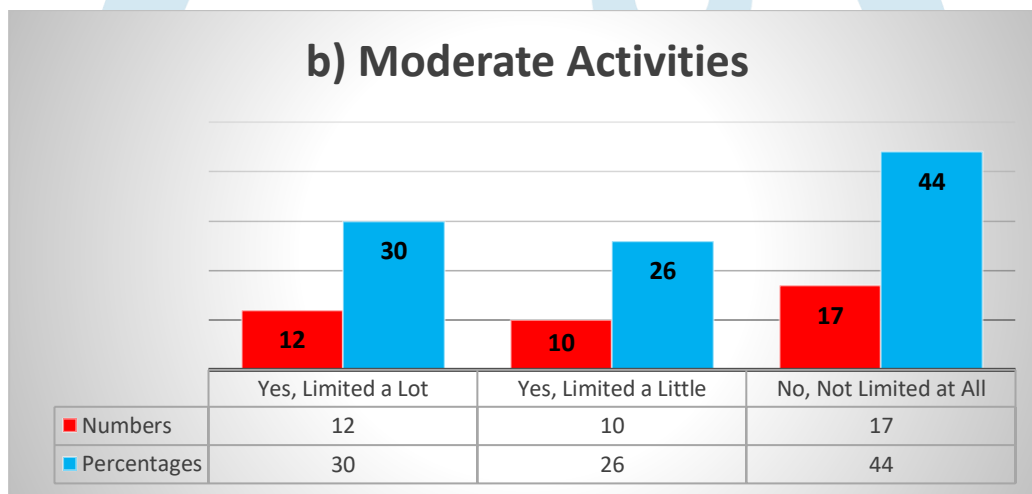
The above table 5 and figure 5 reveals the vigorous activities of the selected samples. 21% of the selected samples were said yes, limited a lot, 23% of the selected sample were said yes. limited a little, 56% of the selected sample were said no not limited at all. The majority were said No,not limited at All.

b) Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf

Table -6

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	12	30%
Yes, Limited a Little	1	10	26%
No, Not Limited at All	0	17	44%
	Total	39	100%

Figure – 6



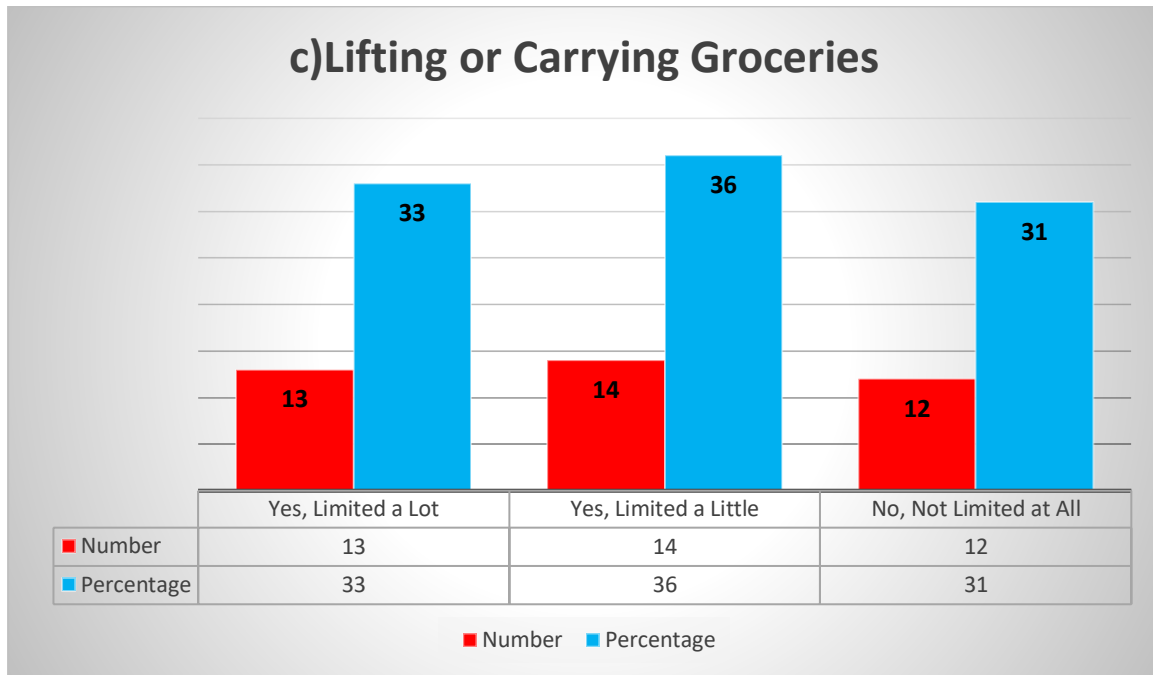
The above table 6 and figure 6 reveals the moderate activities of the selected samples. 30% of the selected samples were said yes, limited a lot, 26% of the selected sample were said yes. limited a little, 44% of the selected sample were said no not limited at all. The majority were said No, not limited at All.

c) Lifting or carrying groceries

Table – 7

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	13	33%
Yes, Limited a Little	1	14	36%
No, Not Limited at All	0	12	31%
	Total	39	100%

Figure – 7



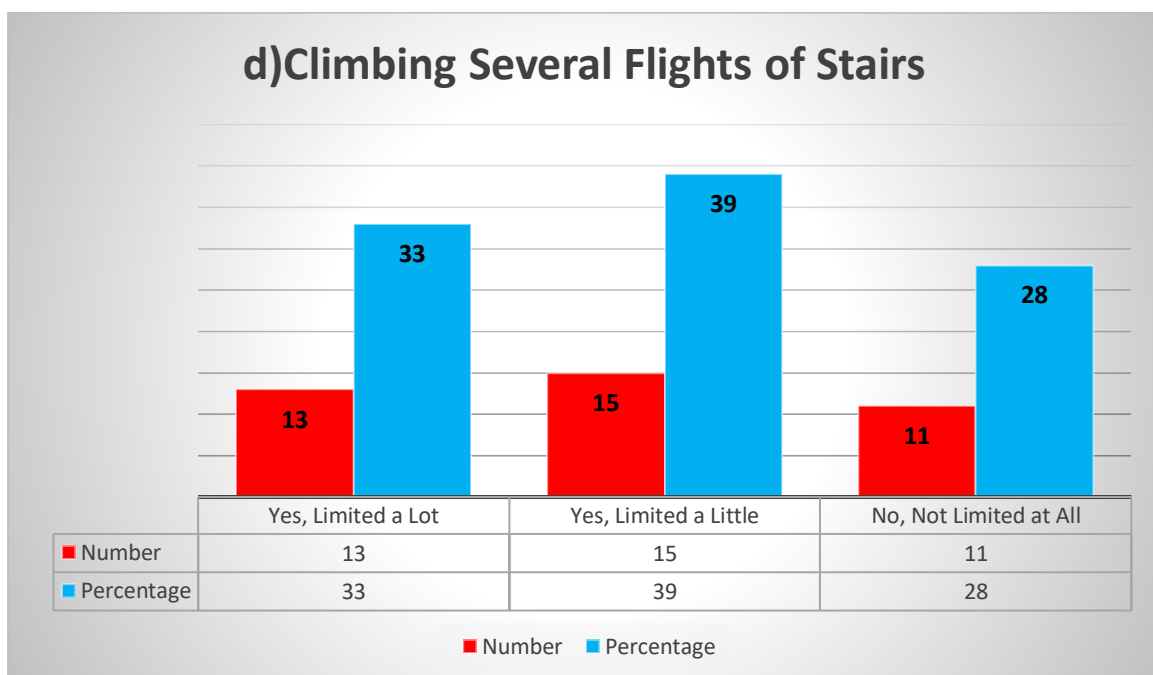
The above table 7 and figure 7 reveals the lifting or carrying groceries of the selected samples. 33% of the selected samples were said yes, limited a lot, 36% of the selected sample were said yes. limited a little, 31% of the selected sample were said no not limited at all. The majority were said yes, limited a little.

d) Climbing several flights of stairs

Table – 8

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	13	33%
Yes, Limited a Little	1	15	39%
No, Not Limited at All	0	11	28%
	Total	39	100%

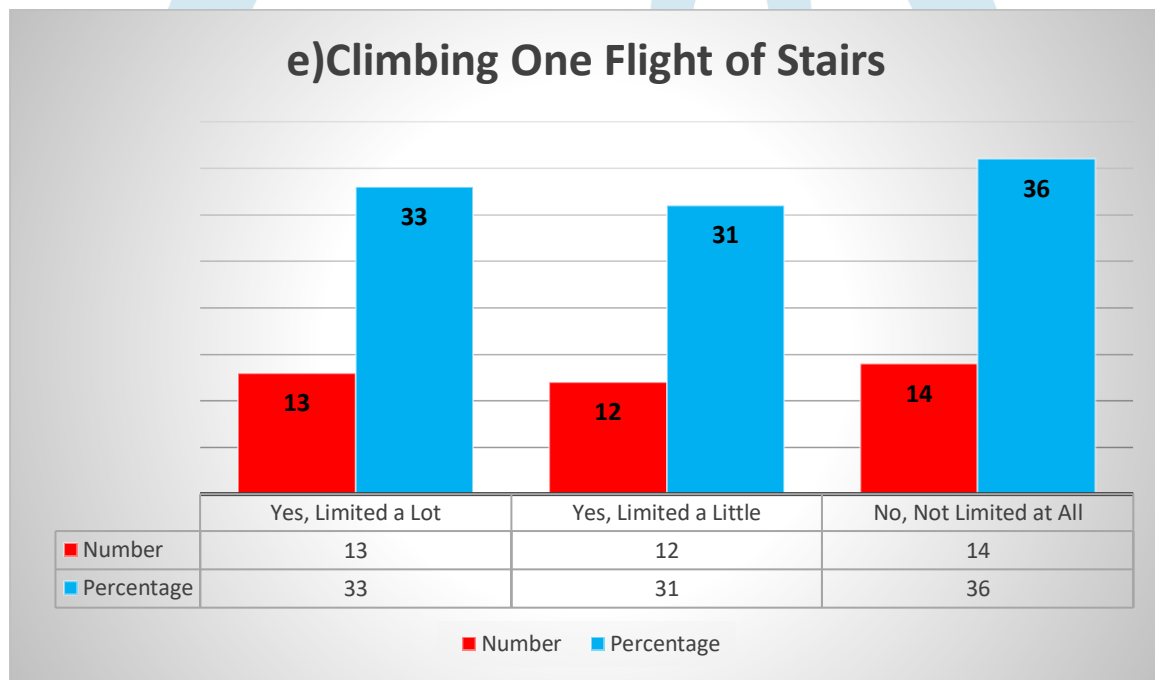
Figure – 8



The above table 8 and figure 8 reveals the Climbing several flights of stairs of the selected samples. 33% of the selected samples were said yes, limited a lot, 39% of the selected sample were said yes. limited a little, 28% of the selected sample were said no not limited at all. The majority were said yes, limited a little.

e) Climbing one flight of stairs**Table – 9**

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	13	33%
Yes, Limited a Little	1	12	31%
No, Not Limited at All	0	14	36%
	Total	39	100%

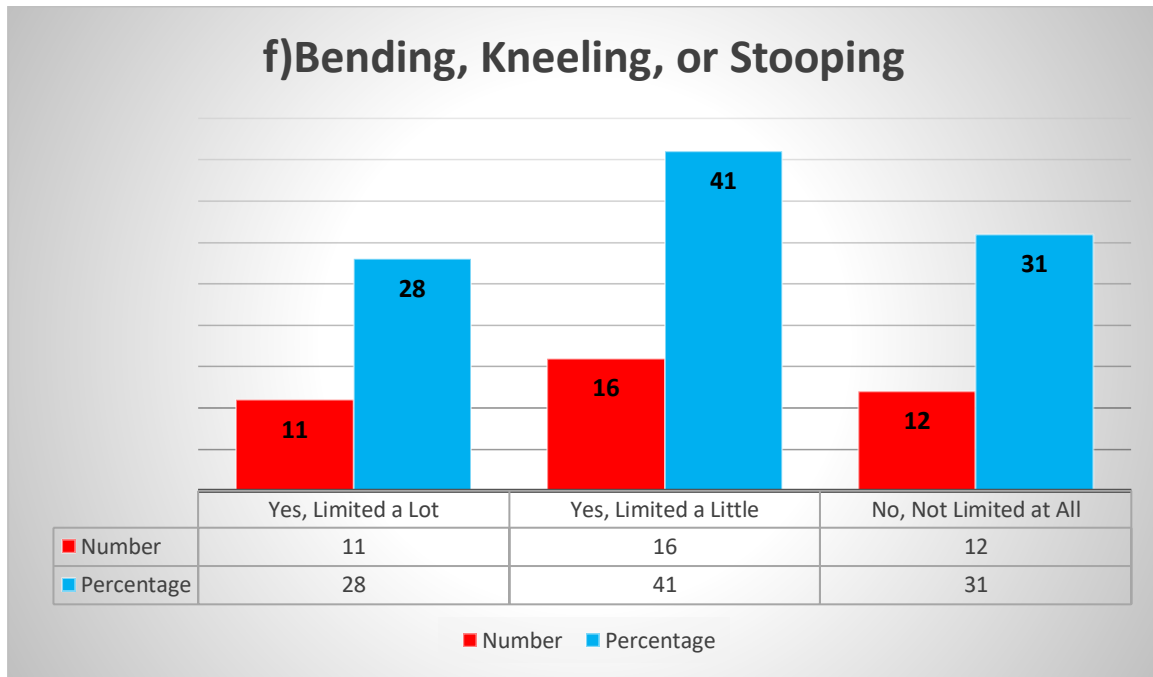
Figure – 9

The above table 9 and figure 9 reveals the Climbing one flight of stairs of the selected samples. 33% of the selected samples were said yes, limited a lot, 31% of the selected sample were said yes. limited a little, 36% of the selected sample were said no not limited at all. The majority were said no, not limited at all.

f) Bending, kneeling, or stooping**Table – 10**

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	11	28%
Yes, Limited a Little	1	16	41%
No, Not Limited at All	0	12	31%
	Total	39	100%

Figure – 10



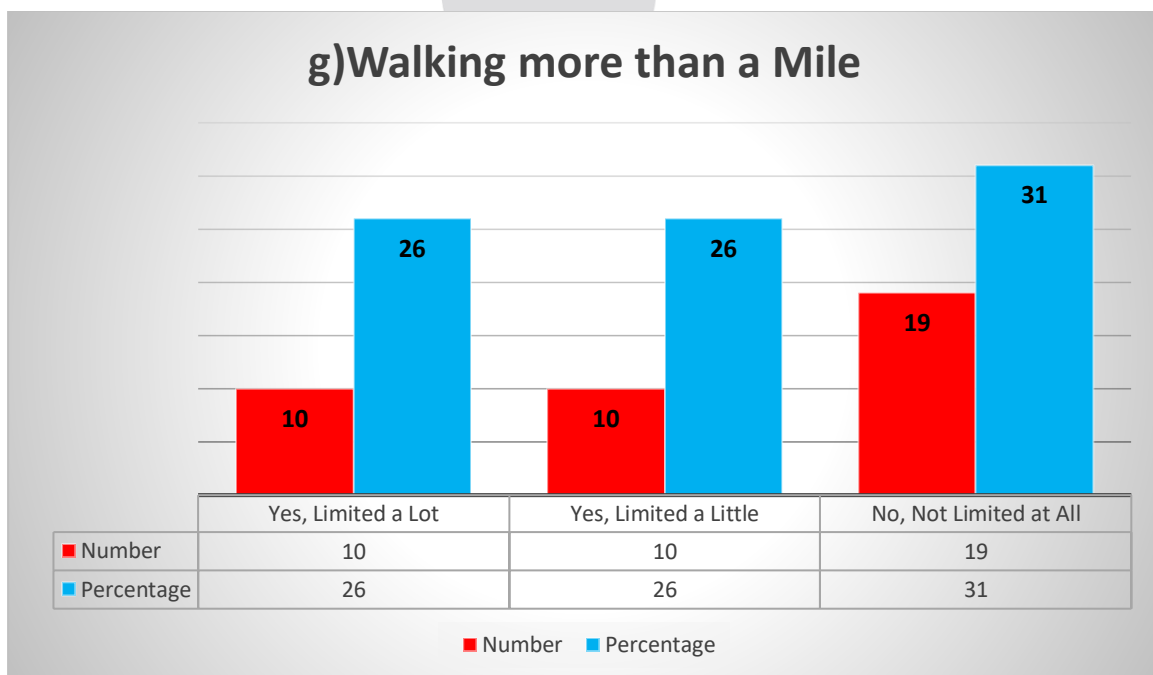
The above table 10 and figure 10 reveals the Bending, kneeling, or stooping of the selected samples. 28% of the selected samples were said yes, limited a lot, 41% of the selected sample were said yes. limited a little, 31% of the selected sample were said no not limited at all. The majority were said yes, limited a little.

g) Walking more than a mile

Table – 11

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	10	26%
Yes, Limited a Little	1	10	26%
No, Not Limited at All	0	19	48%
	Total	39	100%

Figure – 11



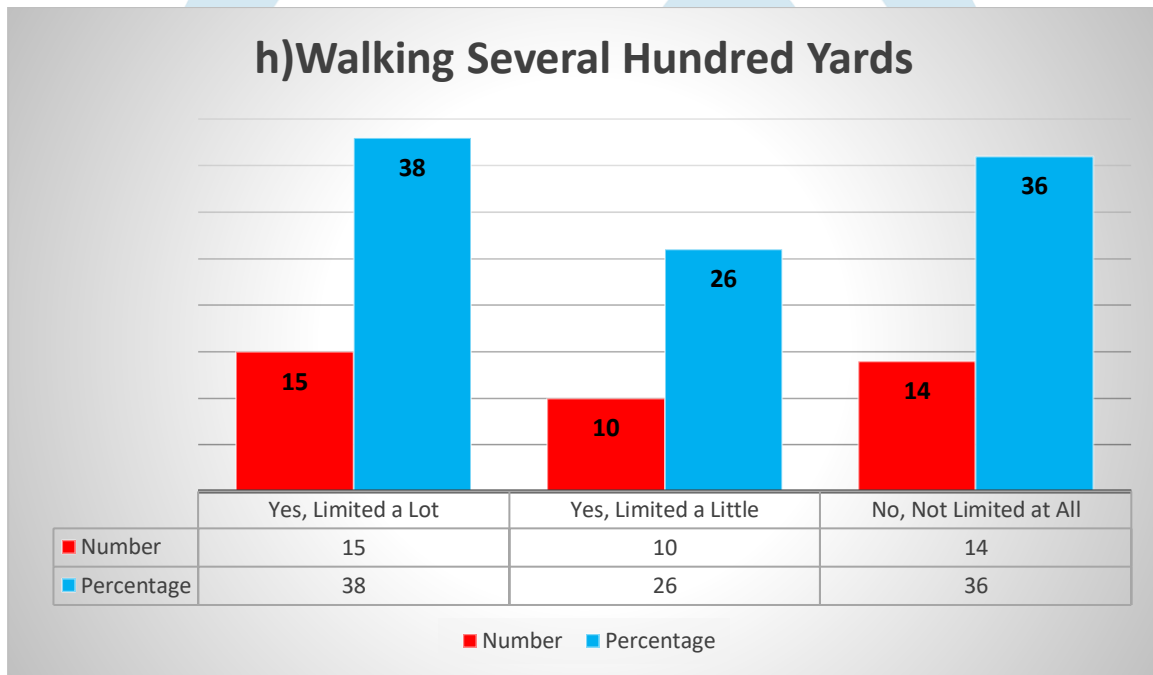
The above table 11 and figure 11 reveals the Walking more than a mile of the selected samples. 26% of the selected samples were said yes, limited a lot, 26% of the selected sample were said yes. limited a little, 31% of the selected sample were said no not limited at all. The majority were said no, not limited at all.

h) Walking several hundred yards

Table – 12

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	15	38%
Yes, Limited a Little	1	10	26%
No, Not Limited at All	0	14	36%
	Total	39	100%

Figure – 12



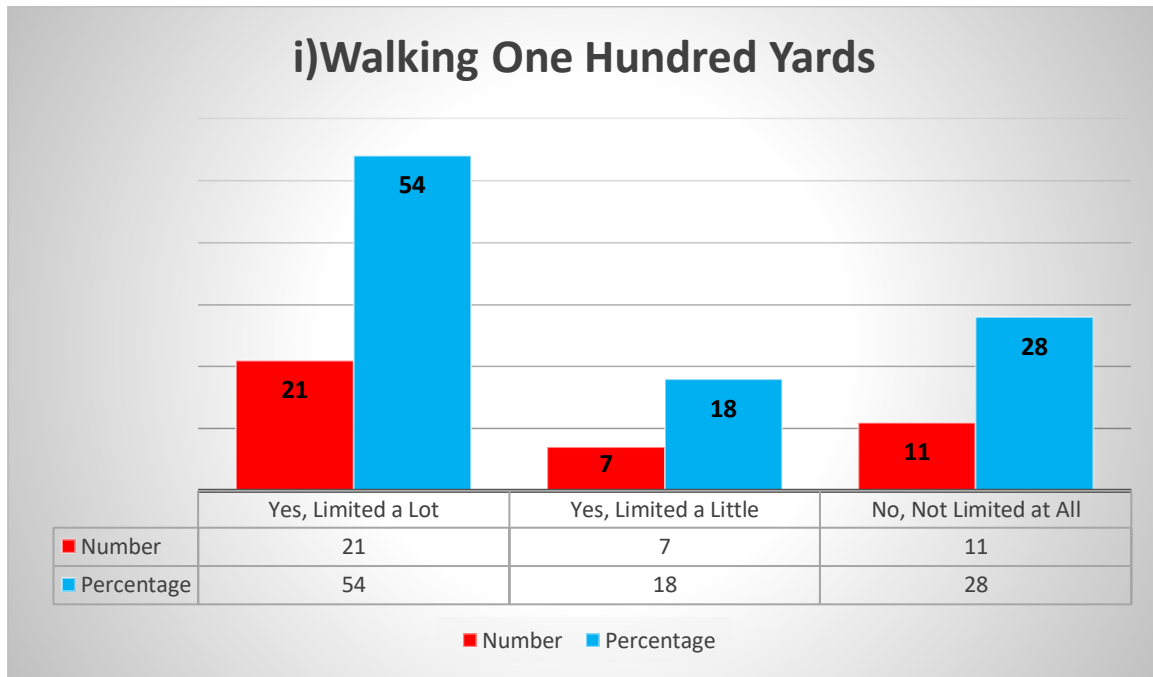
The above table 12 and figure 12 reveals the Walking several hundred yards of the selected samples. 39% of the selected samples were said yes, limited a lot, 26% of the selected sample were said yes. limited a little, 36% of the selected sample were said no not limited at all. The majority were said yes, limited a lot.

i) Walking one hundred yards

Table – 13

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	21	54%
Yes, Limited a Little	1	7	18%
No, Not Limited at All	0	11	28%
	Total	39	100%

Figure – 13



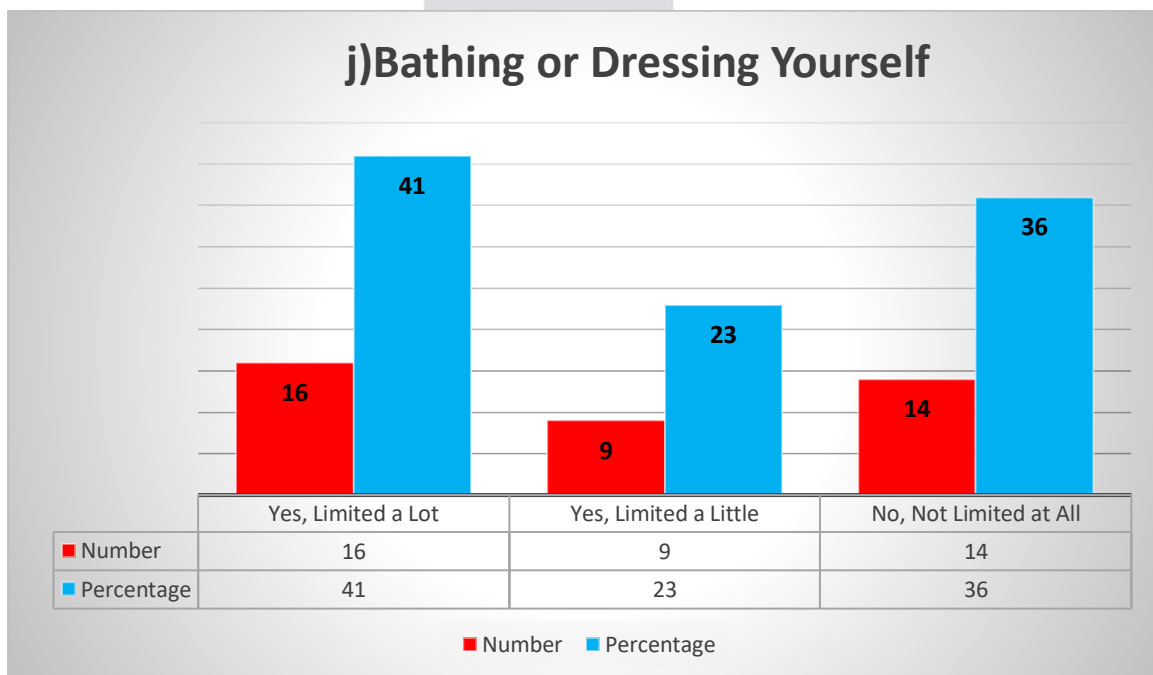
The above table 13 and figure 13 reveals the of Walking one hundred yards the selected samples. 54% of the selected samples were said yes, limited a lot, 18% of the selected sample were said yes, limited a little, 28% of the selected sample were said no not limited at all. The majority were said yes, limited a lot.

j) Bathing or dressing yourself

Table – 14

Valid	Scoring	Number	Percentage
Yes, Limited a Lot	2	16	41%
Yes, Limited a Little	1	9	23%
No, Not Limited at All	0	14	36%
	Total	39	100%

Figure – 14



The above table 14 and figure 14 reveals the Bathing or dressing yourself of the selected samples. 41% of the selected samples were said yes, limited a lot, 23% of the selected sample were said yes, limited a little, 36% of the selected sample were said no not limited at all. The majority were said yes, limited a lot.

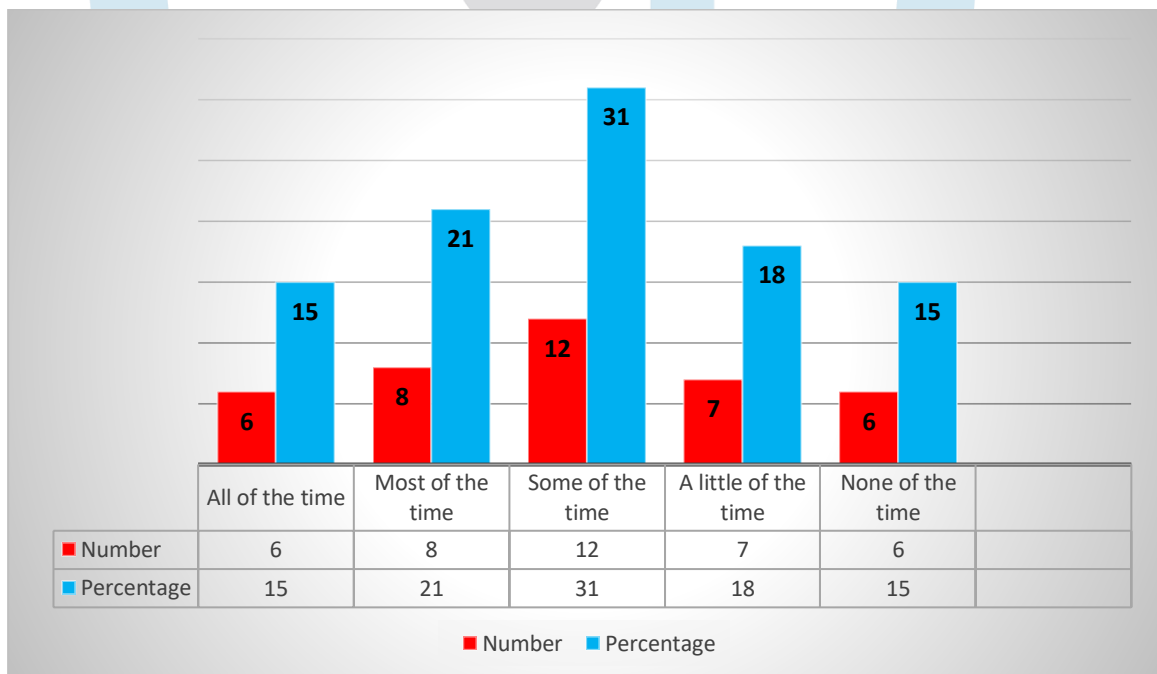
Q4. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

a) Cut down on the amount of time you spent on work or other activities

Table – 15

Valid	Scoring	Number	Percentage
All of the time	4	6	15
Most of the time	3	8	21
Some of the time	2	12	31
A little of the time	1	7	18
None of the time	0	6	15
	Total	39	100

Figure – 15



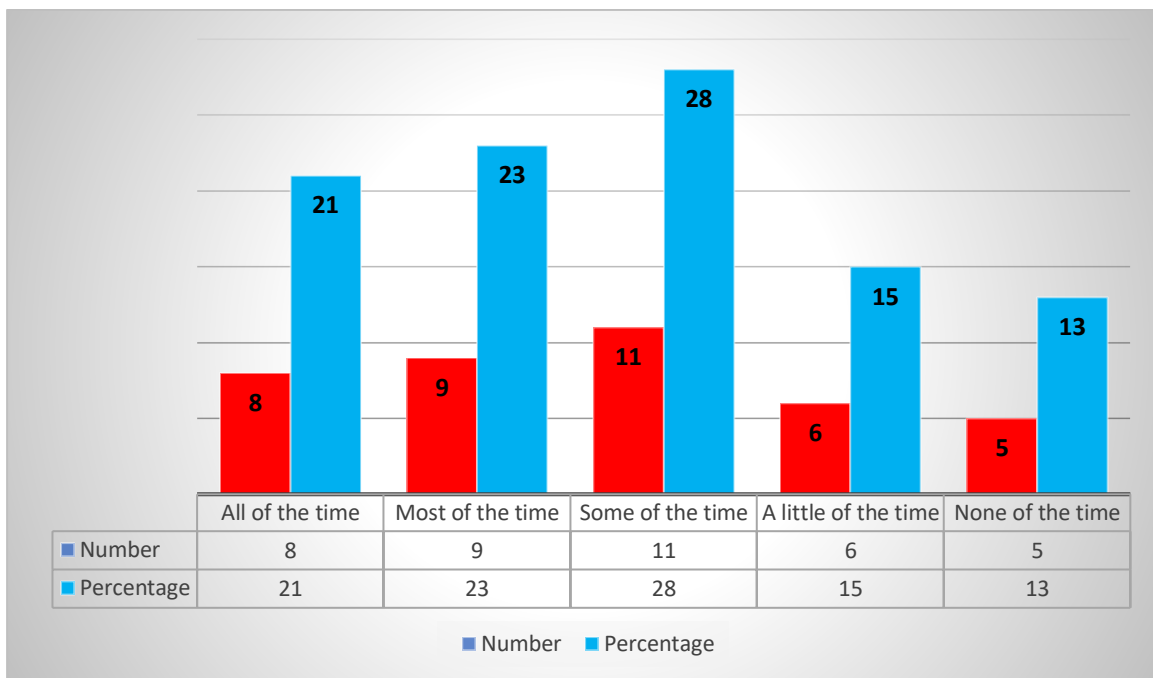
The above table 15 and figure 15 reveals the Cut down on the amount of time you spent on work or other activities of the selected samples. 15% of the selected samples were said all of the time, 21% of the selected sample were said most of the time, 31% of the selected sample were said some of the time. 18% of the selected samples were said a little of the time, 15% of the selected sample were said none of the time. The majority were said some of the time.

b) Accomplished less than you would have liked

Table – 16

Valid	Scoring	Number	Percentage
All of the time	4	8	21
Most of the time	3	9	23
Some of the time	2	11	28
A little of the time	1	6	15
None of the time	0	5	13
	Total	39	100

Figure – 16



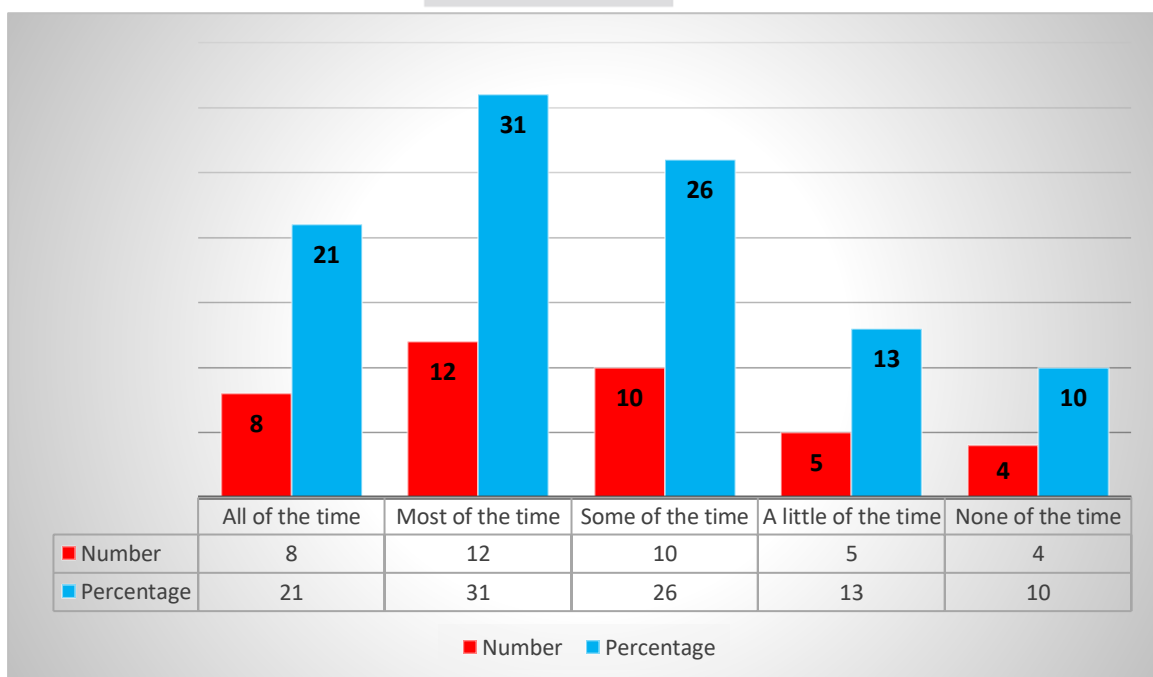
The above table 16 and figure 16 reveals the Accomplished less than you would have liked of the selected samples. 21% of the selected samples were said all of the time, 23% of the selected sample were said most of the time, 28% of the selected sample were said some of the time. 15% of the selected samples were said a little of the time, 13% of the selected sample were said none of the time. The majority were said some of the time.

c) Were limited in the kind of work or other activities

Table – 17

Valid	Scoring	Number	Percentage
All of the time	4	8	21
Most of the time	3	12	31
Some of the time	2	10	26
A little of the time	1	5	13
None of the time	0	4	10
	Total	39	100

Figure – 17



The above table 17 and figure 17 reveals the Were limited in the kind of work or other activities of the selected samples. 21% of the selected samples were said all of the time, 31% of the selected sample were said most of

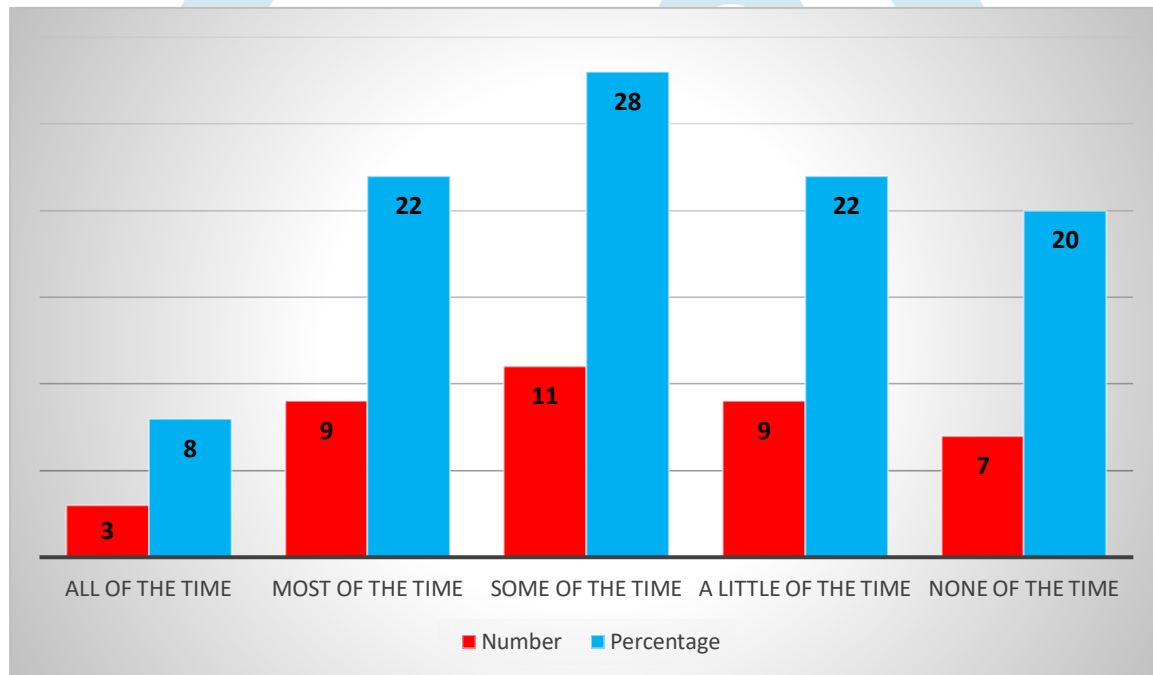
the time, 26% of the selected sample were said some of the time. 13% of the selected samples were said a little of the time, 10% of the selected sample were said none of the time. The majority were said most of the time.

d) Had difficulty performing the work or other activities (for example, it took extra effort)

Table – 18

Valid	Scoring	Number	Percentage
All of the time	4	3	8
Most of the time	3	9	22
Some of the time	2	11	28
A little of the time	1	9	22
None of the time	0	7	20
	Total	39	100

Figure – 18



The above table 18 and figure 18 reveals the Had difficulty performing the work or other activities (for example, it took extra effort) of the selected samples. 8% of the selected samples were said all of the time, 22% of the selected sample were said most of the time, 28% of the selected sample were said some of the time. 22% of the selected samples were said a little of the time, 20% of the selected sample were said none of the time. The majority were said some of the time.

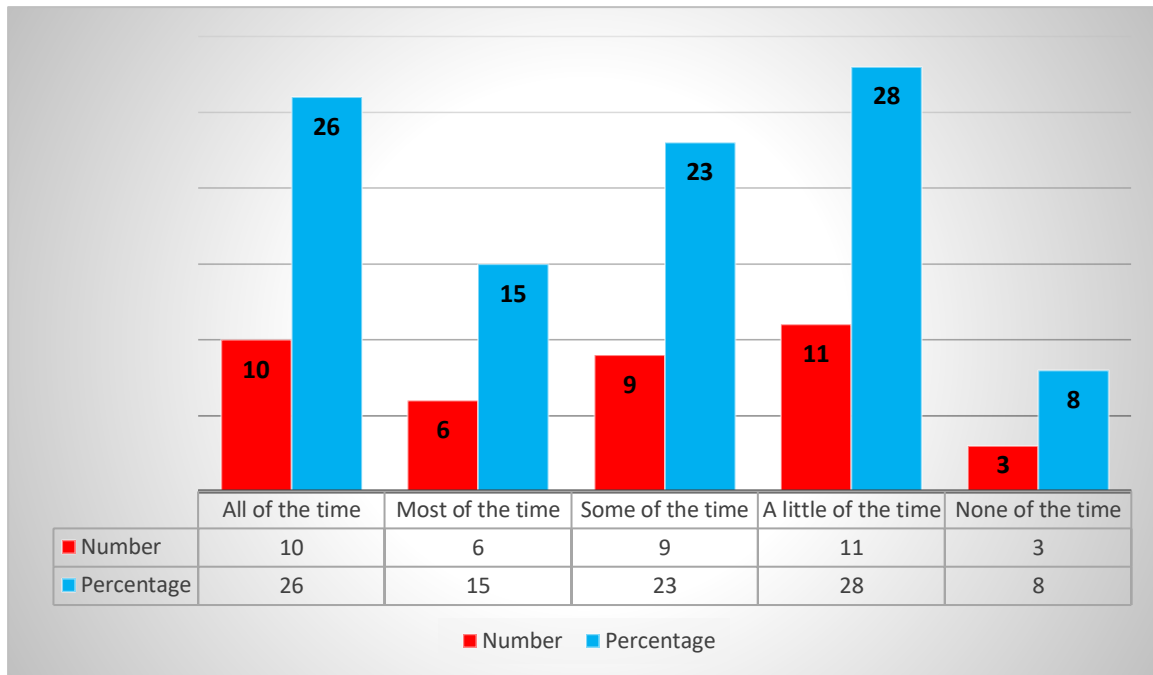
Q5. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

a) Cut down the amount of time you spent on work or other activities

Table – 19

Valid	Scoring	Number	Percentage
All of the time	4	10	26
Most of the time	3	6	15
Some of the time	2	9	23
A little of the time	1	11	28
None of the time	0	3	8
	Total	39	100

Figure – 19



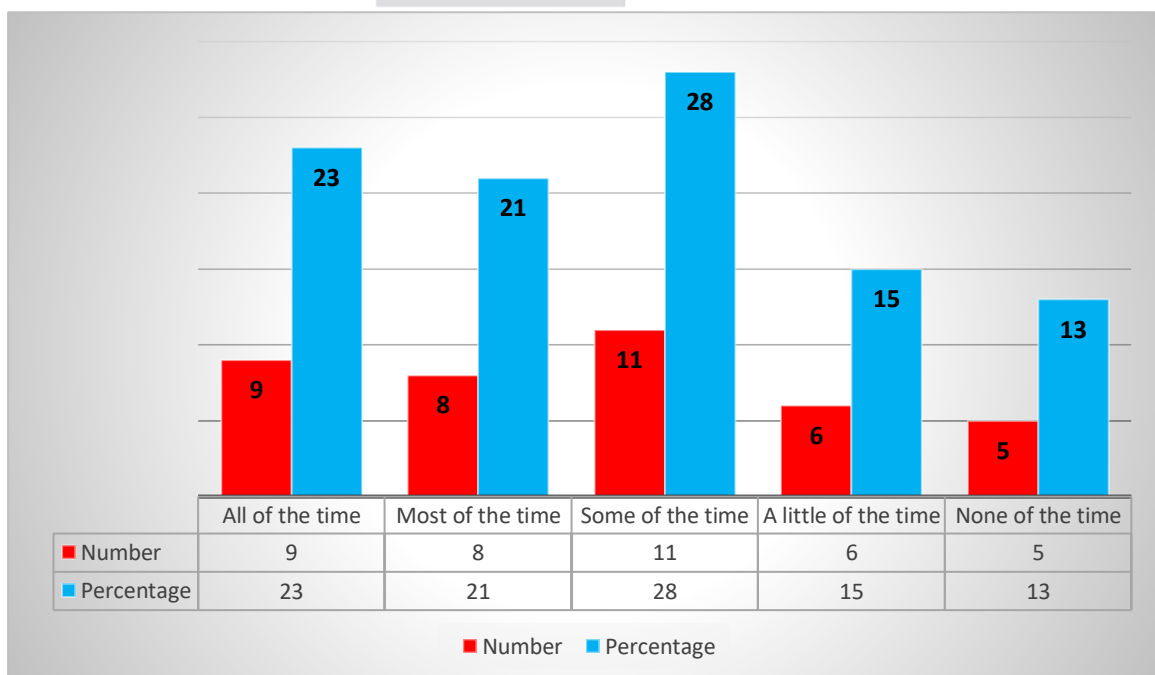
a) The above table 19 and figure 19 reveals the Cut down the amount of time you spent on work or other activities of the selected samples. 26% of the selected samples were said all of the time, 15% of the selected sample were said most of the time, 23% of the selected sample were said some of the time. 28% of the selected samples were said a little of the time, 8% of the selected sample were said none of the time. The majority were said a little of the time.

b) **Accomplished less than you would like**

Table – 20

Valid	Scoring	Number	Percentage
All of the time	4	9	23
Most of the time	3	8	21
Some of the time	2	11	28
A little of the time	1	6	15
None of the time	0	5	13
	Total	39	100

Figure – 20



The above table 20 and figure 20 reveals the Accomplished less than you would like of the selected samples. 23% of the selected samples were said all of the time, 21% of the selected sample were said

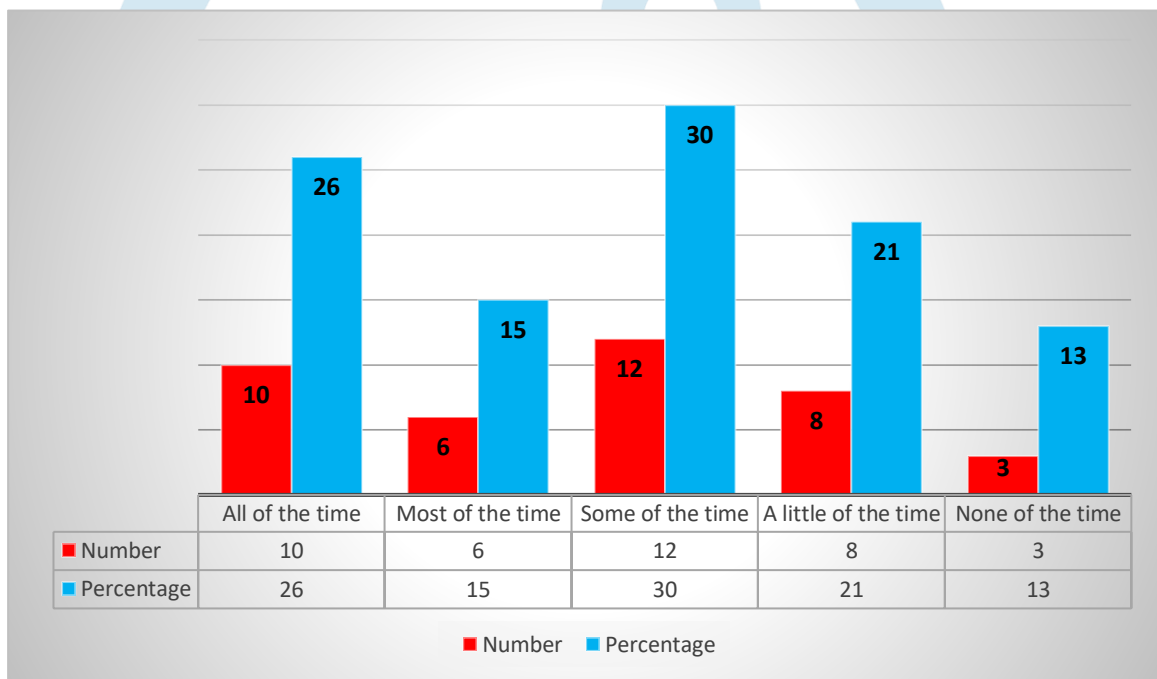
most of the time, 28% of the selected sample were said some of the time. 15% of the selected samples were said a little of the time, 13% of the selected sample were said none of the time. The majority were said some of the time.

c) Did your work or activities less carefully than usual

Table – 21

Valid	Scoring	Number	Percentage
All of the time	4	10	26
Most of the time	3	6	15
Some of the time	2	12	30
A little of the time	1	8	21
None of the time	0	3	8
	Total	39	100

Figure – 21



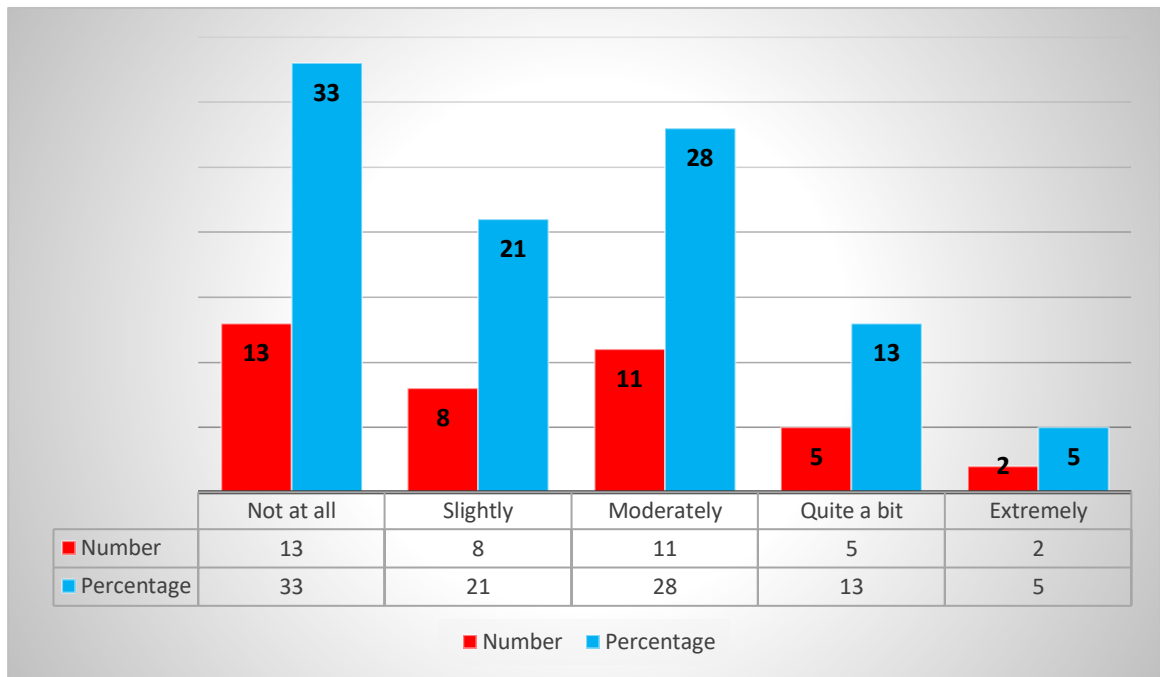
The above table 21 and figure 21 reveals the Did your work or activities less carefully than usual of the selected samples. 26% of the selected samples were said all of the time, 15% of the selected sample were said most of the time, 30% of the selected sample were said some of the time. 21% of the selected samples were said a little of the time, 13% of the selected sample were said none of the time. The majority were said some of the time.

Q6. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

Table – 22

Valid	Scoring	Number	Percentage
Not at all	0	13	33
Slightly	1	8	21
Moderately	2	11	28
Quite a bit	3	5	13
Extremely	4	2	5
	Total	39	100

Figure – 22



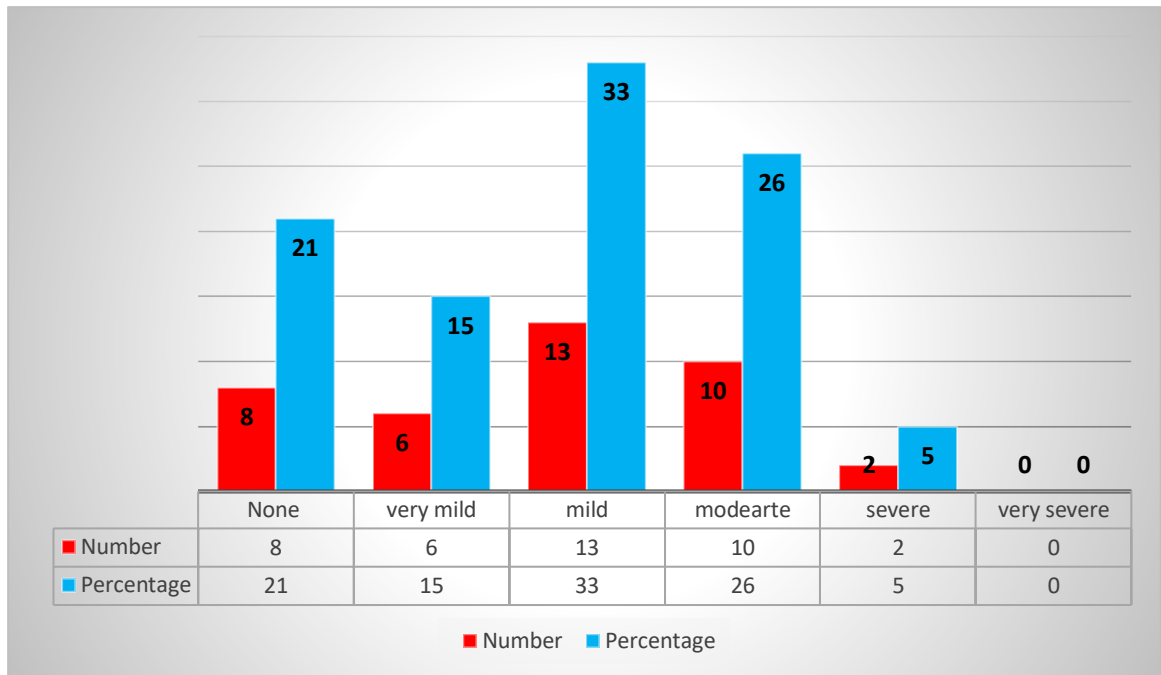
The above table 22 and figure 22 reveals the physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups of the selected samples. 33% of the selected samples were said not at all, 21% of the selected sample were said slightly, 28% of the selected sample were said moderately. 13% of the selected samples were said quite a bit, 5% of the selected sample were said none of the time. The majority were said moderately interfered.

Q7. How much bodily pain have you had during the past 4 weeks?

Table – 23

Valid	Scoring	Number	Percentage
None	0	8	21
Very mild	1	6	15
Mild	2	13	33
Moderate	3	10	26
Severe	4	2	5
Very severe	5	-	-
	Total	39	100

Figure – 23



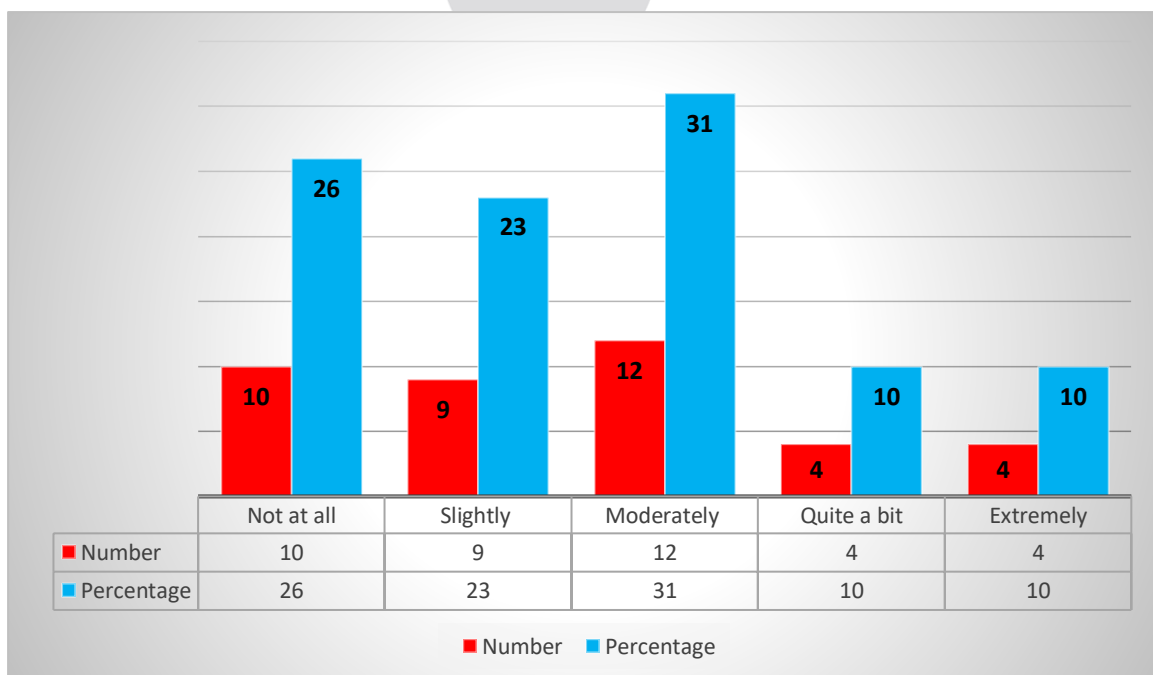
The above table 23 and figure 23 reveals the how much bodily pain have you had during the past 4 weeks of the selected samples. 21% of the selected samples were said none, 15% of the selected sample were said very mild, 33% of the selected sample were said mild. 26% of the selected samples were said moderate, 5% of the selected sample were said severe. The majority were said mild pain.

Q8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)

Table – 24

Valid	Scoring	Number	Percentage
Not at all	0	10	26
Slightly	1	9	23
Moderately	2	12	31
Quite a bit	3	4	10
Extremely	4	4	10
	Total	39	100

Figure – 24



The above table 24 and figure 24 reveals the during past 4 weeks how much did pain interfere with your normal work (including both work outside the home and housework) of the selected samples. 26% of the selected samples were said not at all, 23% of the selected sample were said slightly, 31% of the selected sample were said moderately. 10% of the selected samples were said quite a bit, 10% of the selected sample were said extremely. The majority were said moderately.

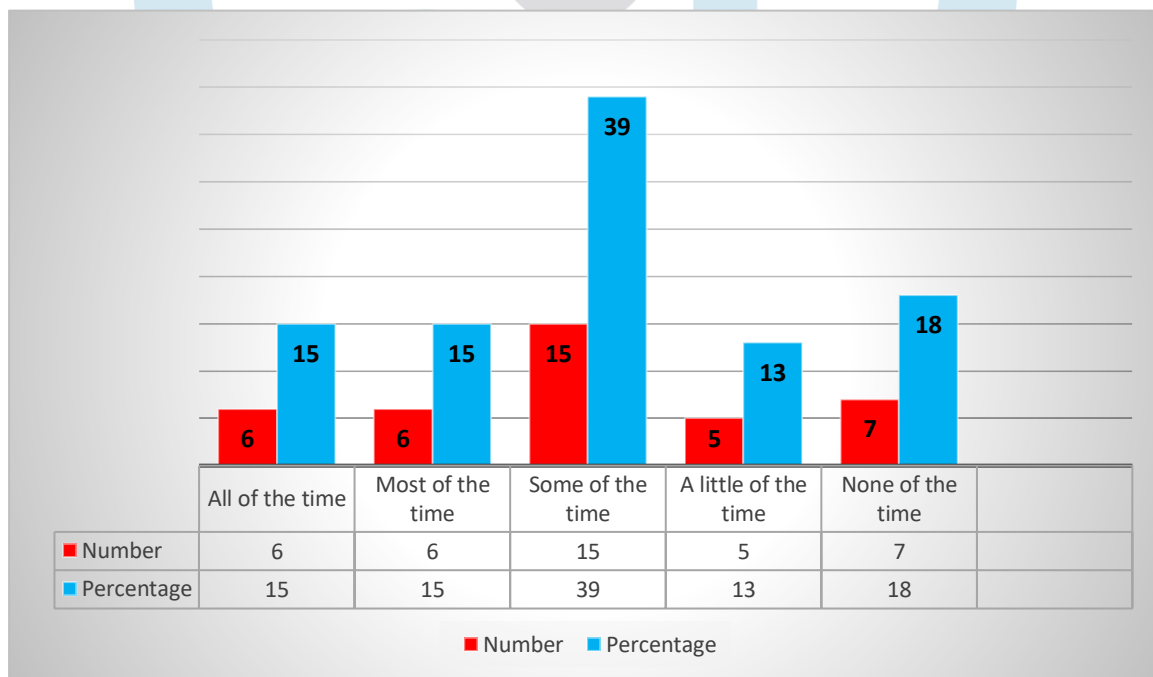
Q9. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

a. Did you feel full of life?

Table – 25

Valid	Scoring	Number	Percentage
All of the time	4	6	15
Most of the time	3	6	15
Some of the time	2	15	39
A little of the time	1	5	13
None of the time	0	7	18
	Total	39	100

Figure - 25



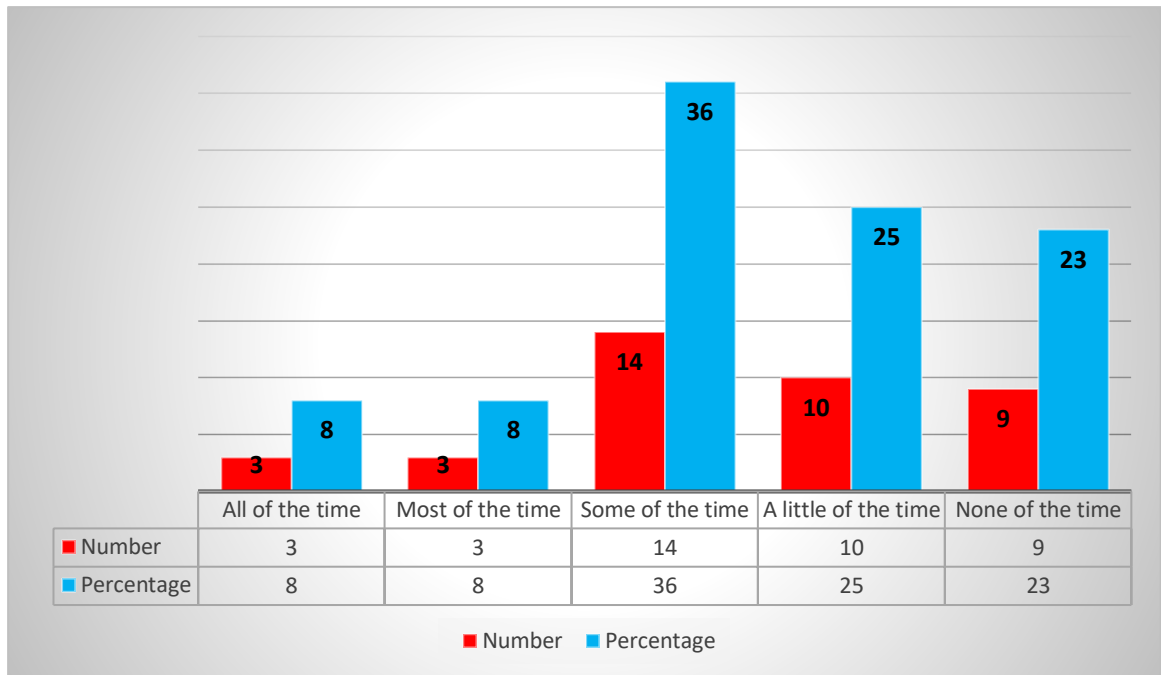
The above table 25 and figure 25 reveals the during the past 4 weeks, did you feel full of life of the selected samples. 15% of the selected samples were said all of the time, 15% of the selected sample were said most of the time, 39% of the selected sample were said some of the time. 13% of the selected samples were said a little of the time, 18% of the selected sample were said none of the time. The majority were said some of the time.

b. Have you been very nervous

Table – 26

Valid	Scoring	Number	Percentage
All of the time	4	3	8
Most of the time	3	3	8
Some of the time	2	14	36
A little of the time	1	10	25
None of the time	0	9	23
	Total	39	100

Figure – 26



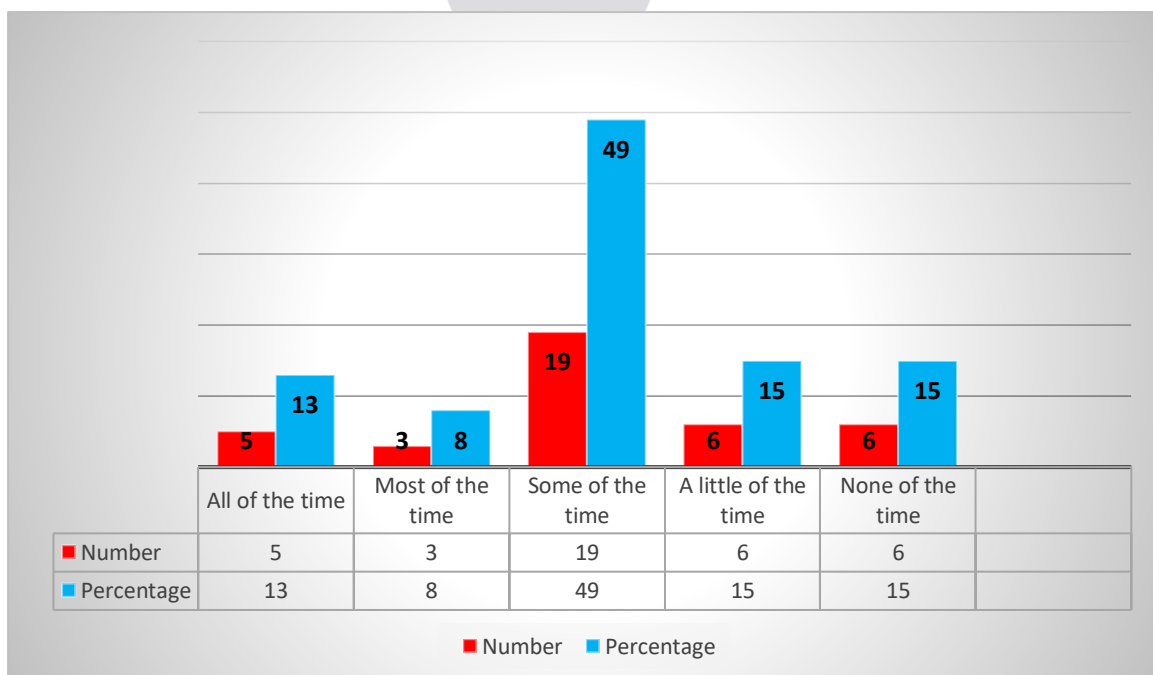
The above table 26 and figure 26 reveals the during the past 4 weeks, have you been very nervous of the selected samples. 8% of the selected samples were said all of the time, 8% of the selected sample were said most of the time, 36% of the selected sample were said some of the time. 25% of the selected samples were said a little of the time, 23% of the selected sample were said none of the time. The majority were said some of the time.

c. Have you felt so down in the dumps that nothing could cheer you up

Table – 27

Valid	Scoring	Number	Percentage
All of the time	4	5	13
Most of the time	3	3	8
Some of the time	2	19	49
A little of the time	1	6	15
None of the time	0	6	15
	Total	39	100

Figure – 27



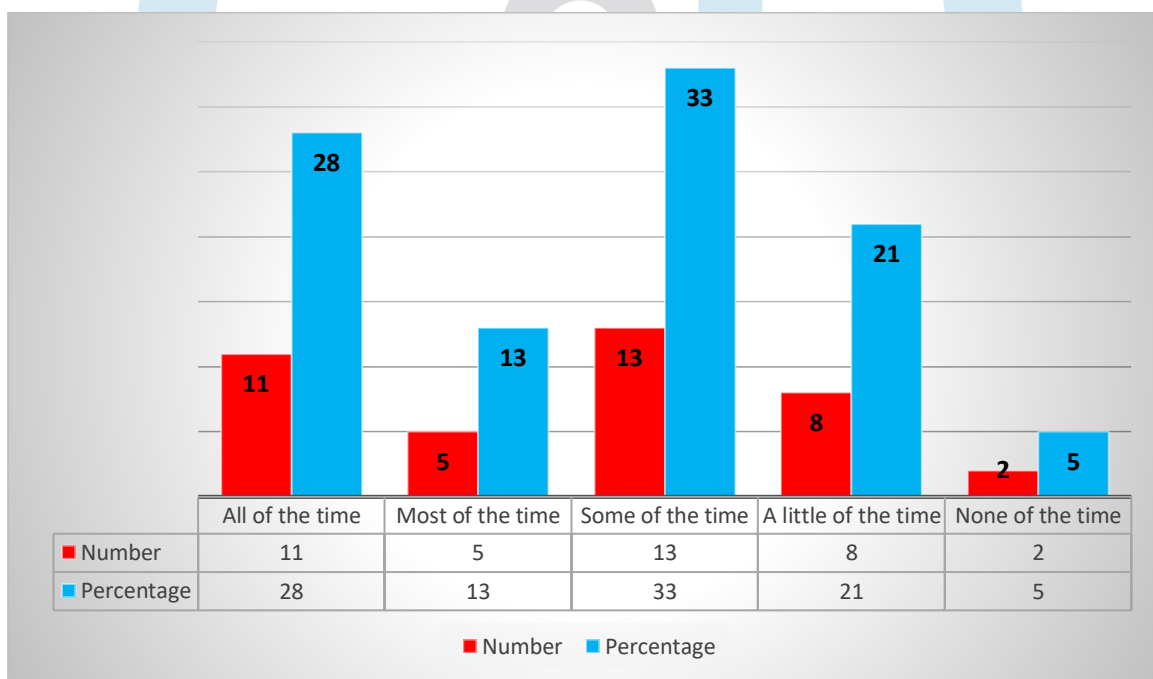
The above table 27 and figure 27 reveals the have you felt so down in the dumps that nothing could cheer you up of the selected samples. 13% of the selected samples were said all of the time, 8% of the selected sample were said most of the time, 49% of the selected sample were said some of the time. 15% of the selected samples were said a little of the time, 15% of the selected sample were said none of the time. The majority were said some of the time.

d. Have you felt calm and peaceful

Table – 28

Valid	Scoring	Number	Percentage
All of the time	4	11	28
Most of the time	3	5	13
Some of the time	2	13	33
A little of the time	1	8	21
None of the time	0	2	5
	Total	39	100

Figure – 28



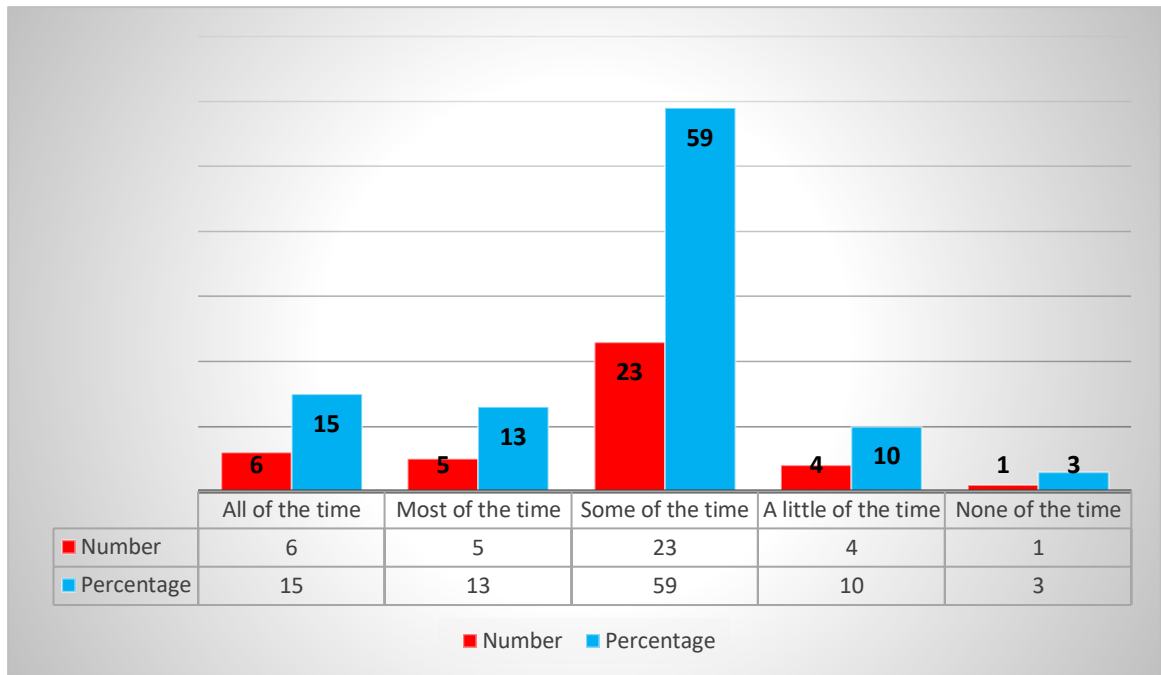
The above table 28 and figure 28 reveals the have you felt calm and peaceful of the selected samples. 28% of the selected samples were said all of the time, 13% of the selected sample were said most of the time, 33% of the selected sample were said some of the time. 21% of the selected samples were said a little of the time, 5% of the selected sample were said none of the time. The majority were said some of the time.

e. Did you have a lot of energy

Table – 29

Valid	Scoring	Number	Percentage
All of the time	4	6	15
Most of the time	3	5	13
Some of the time	2	23	59
A little of the time	1	4	10
None of the time	0	1	3
	Total	39	100

Figure – 29



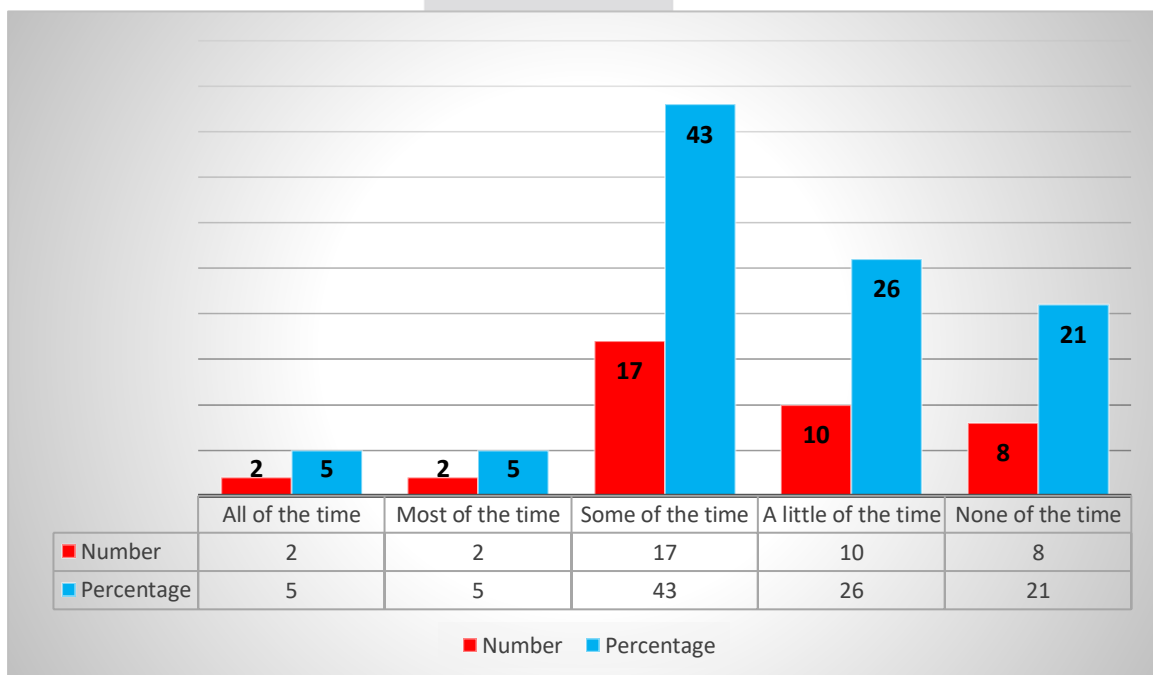
The above table 29 and figure 29 reveals the did you have a lot of energy of the selected samples. 15% of the selected samples were said all of the time, 13% of the selected sample were said most of the time, 59% of the selected sample were said some of the time. 10% of the selected samples were said a little of the time, 3% of the selected sample were said none of the time. The majority were said some of the time.

e. Have you felt downhearted and depressed

Table – 30

Valid	Scoring	Number	Percentage
All of the time	4	2	5
Most of the time	3	2	5
Some of the time	2	17	43
A little of the time	1	10	26
None of the time	0	8	21
	Total	39	100

Figure – 30



The above table 30 and figure 30 reveals the have you felt downhearted and depressed of the selected samples. 5% of the selected samples were said all of the time, 5% of the selected sample were said most

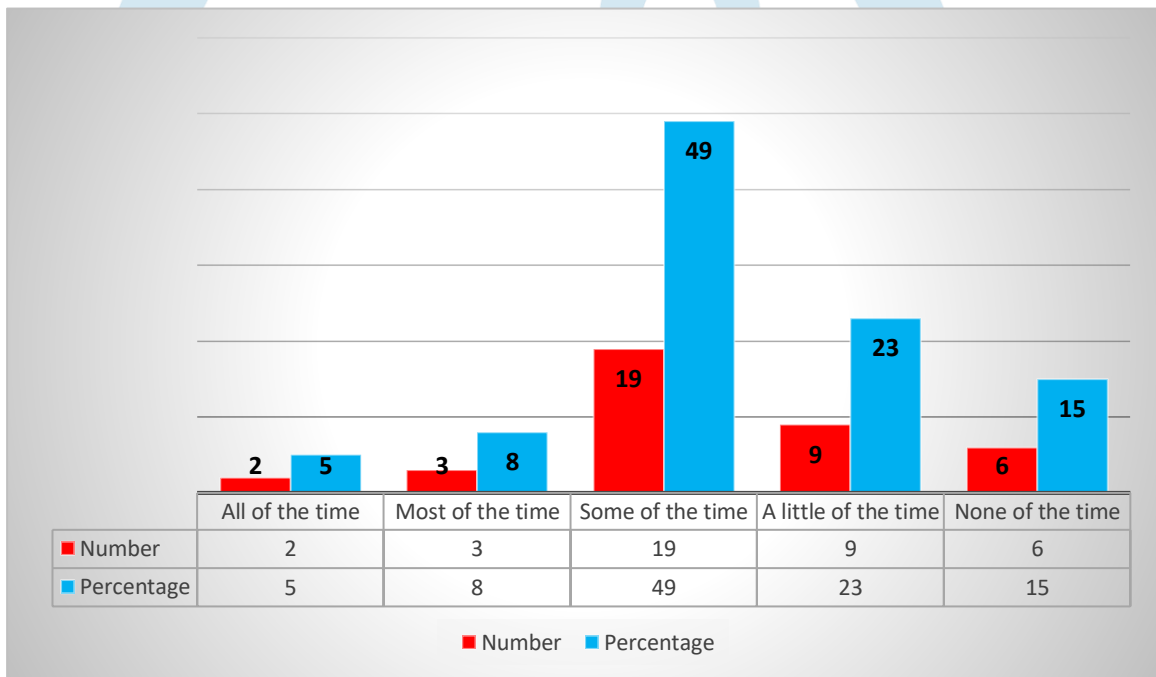
of the time, 43% of the selected sample were said some of the time. 26% of the selected samples were said a little of the time, 21% of the selected sample were said none of the time. The majority were said some of the time.

f. Did you feel worn out

Table – 31

Valid	Scoring	Number	Percentage
All of the time	4	2	5
Most of the time	3	3	8
Some of the time	2	19	49
A little of the time	1	9	23
None of the time	0	6	15
	Total	39	100

Figure – 31



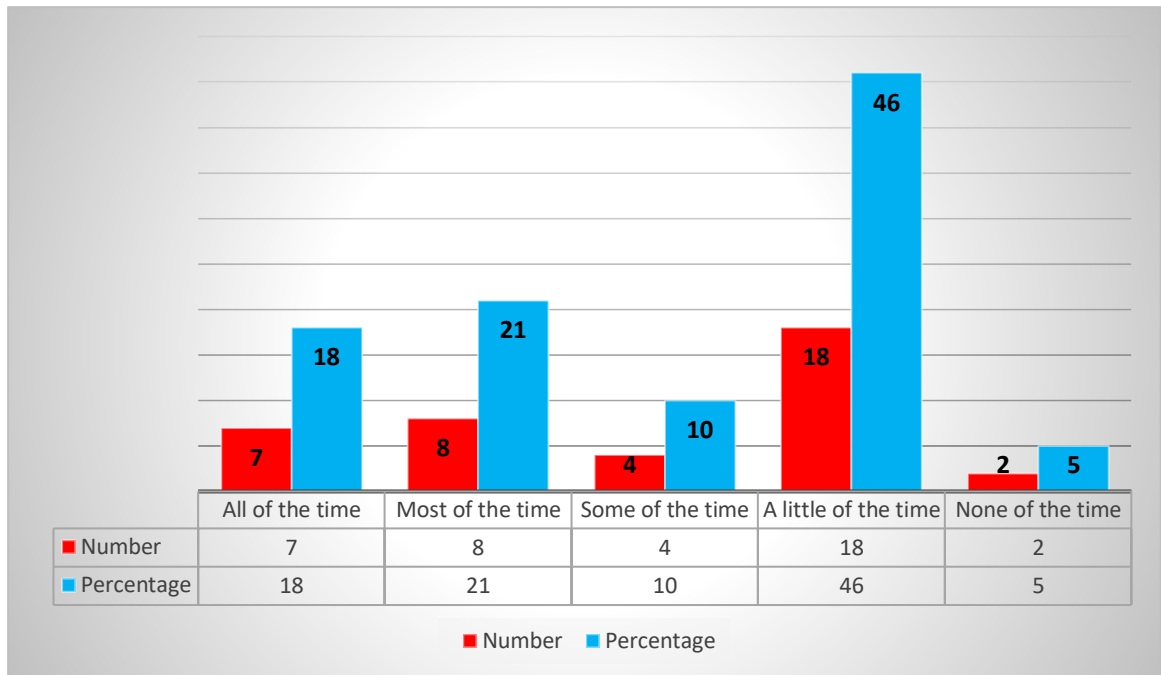
The above table 31 and figure 31 reveals the did you feel worn out of the selected samples. 5% of the selected samples were said all of the time, 8% of the selected sample were said most of the time, 49% of the selected sample were said some of the time. 23% of the selected samples were said a little of the time, 15% of the selected sample were said none of the time. The majority were said some of the time.

g. Have you been happy

Table – 32

Valid	Scoring	Number	Percentage
All of the time	4	7	18
Most of the time	3	8	21
Some of the time	2	4	10
A little of the time	1	18	46
None of the time	0	2	5
	Total	39	100

Figure – 32



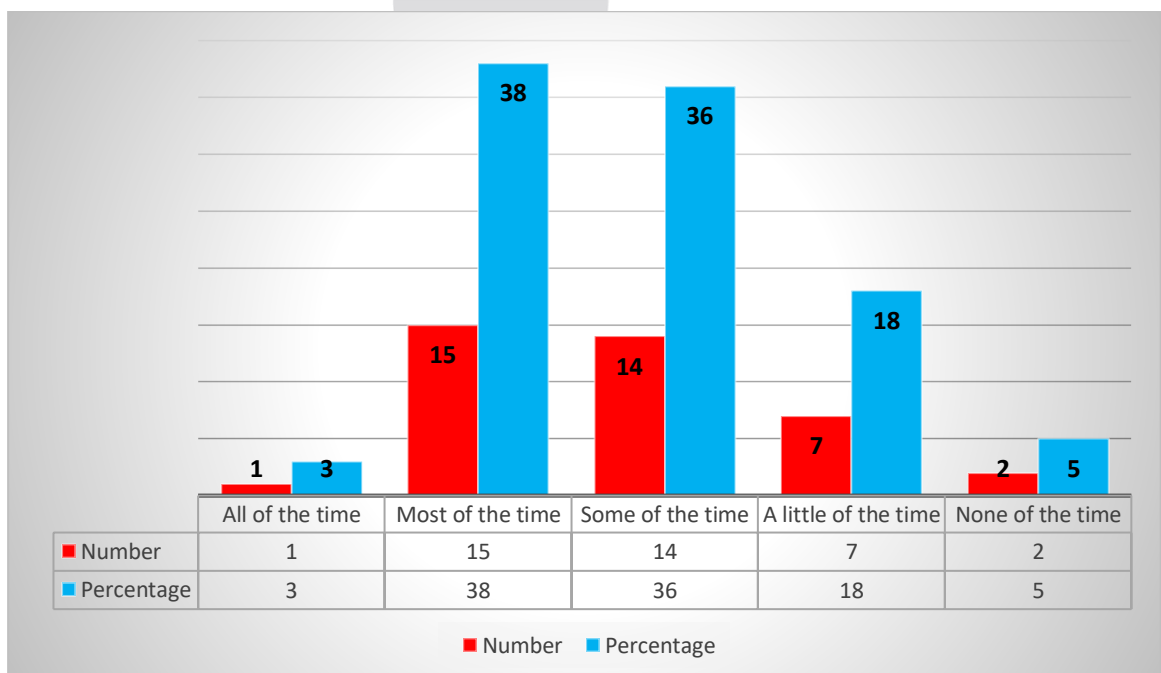
The above table 32 and figure 32 reveals the during past 4 weeks, have you been happy of the selected samples. 18% of the selected samples were said all of the time, 21% of the selected sample were said most of the time, 10% of the selected sample were said some of the time. 46% of the selected samples were said a little of the time, 5% of the selected sample were said none of the time. The majority were said a little of the time.

h. Did you feel tired

Table – 33

Valid	Scoring	Number	Percentage
All of the time	4	1	3
Most of the time	3	15	38
Some of the time	2	14	36
A little of the time	1	7	18
None of the time	0	2	5
	Total	39	100

Figure – 33



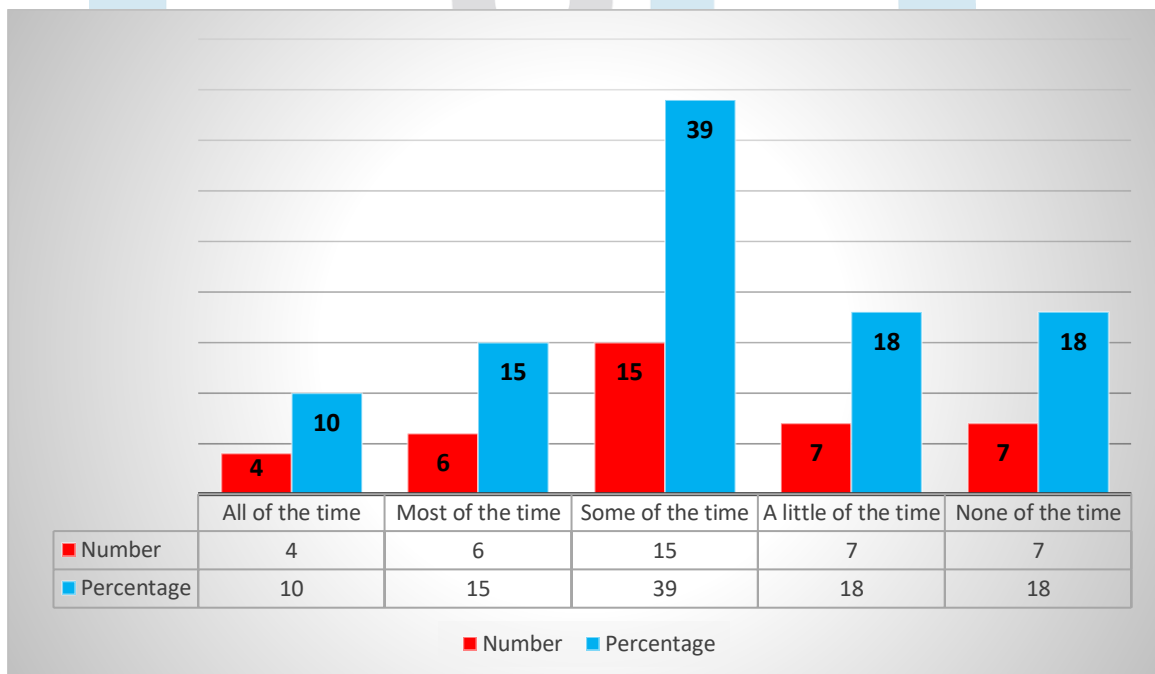
The above table 33 and figure 33 reveals the during the past 4 weeks, did you feel tired of the selected samples. 3% of the selected samples were said all of the time, 38% of the selected sample were said most of the time, 36% of the selected sample were said some of the time. 18% of the selected samples were said a little of the time, 5% of the selected sample were said none of the time. The majority were said a most of the time.

Q10. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)

Table – 34

Valid	Scoring	Number	Percentage
All of the time	4	4	10
Most of the time	3	6	15
Some of the time	2	15	39
A little of the time	1	7	18
None of the time	0	7	18
	Total	39	100

Figure – 34



The above table 34 and figure 34 reveals the during the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.) of the selected samples. 10% of the selected samples were said all of the time, 15% of the selected sample were said most of the time, 39% of the selected sample were said some of the time. 18% of the selected samples were said a little of the time, 18% of the selected sample were said none of the time. The majority were said a some of the time.

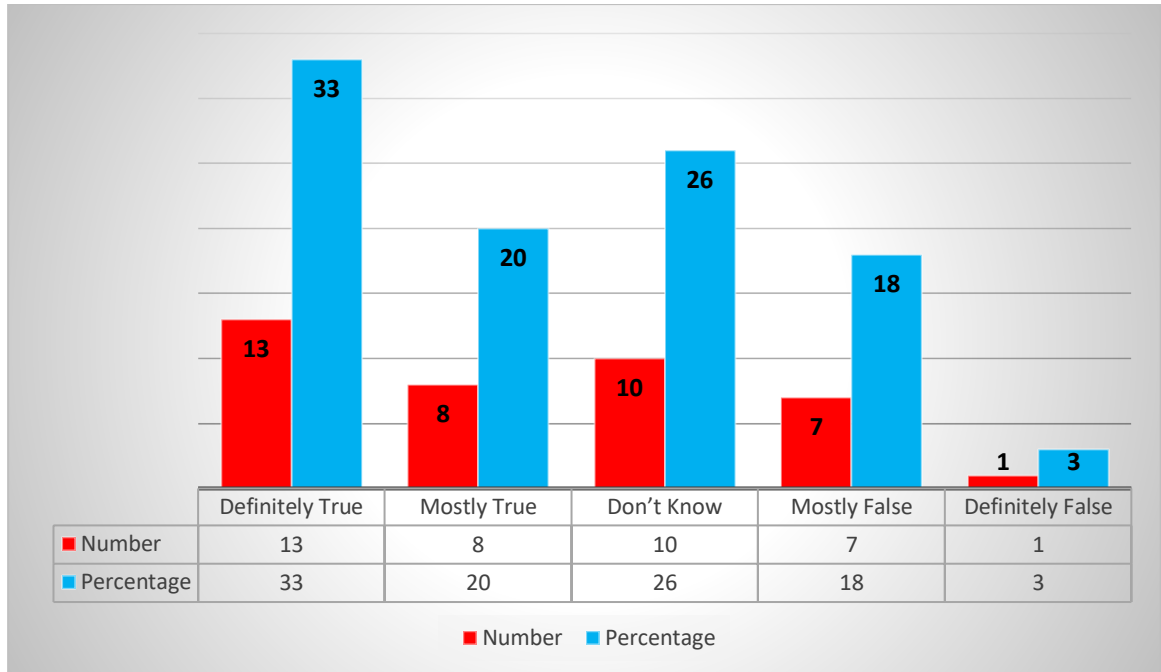
Q11. How TRUE or FALSE is each of the following statements for you?

a. I seem to get sick a little easier than other people

Table – 35

Valid	Scoring	Number	Percentage
Definitely True	4	13	33
Mostly True	3	8	20
Don't Know	2	10	26
Mostly False	1	7	18
Definitely False	0	1	3
	Total	39	100

Figure – 35



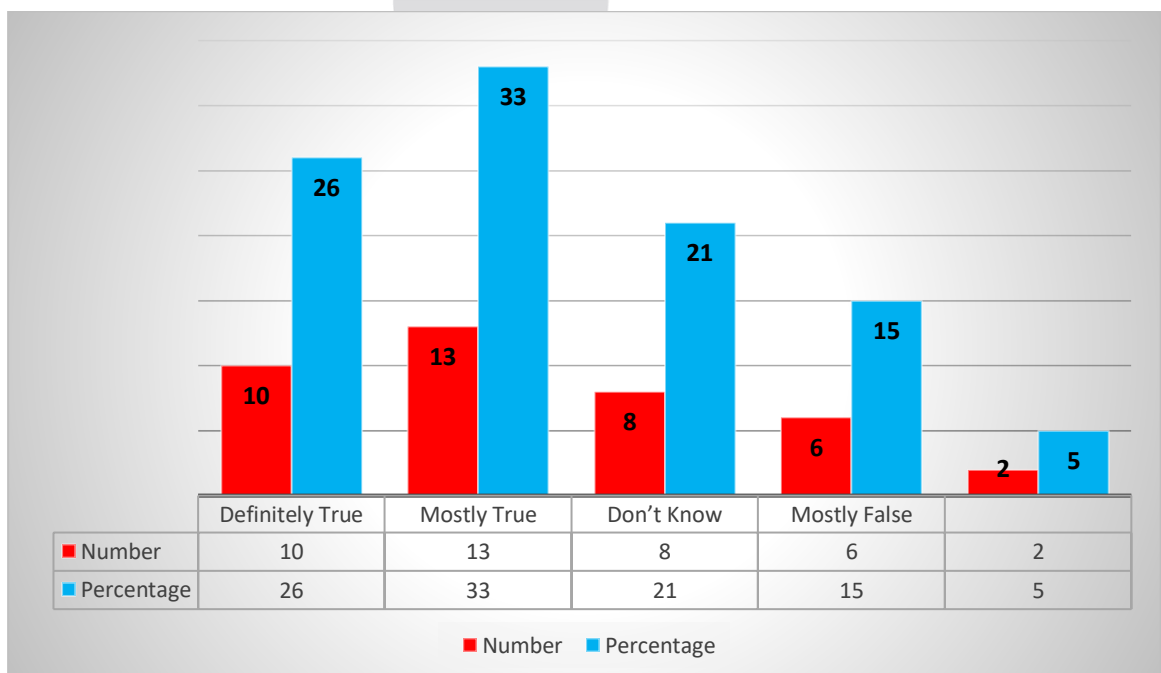
The above table 35 and figure 35 reveals the I seem to get sick a little easier than other people of the selected samples. 33% of the selected samples were said definitely true, 20% of the selected sample were said mostly true, 26% of the selected sample were said don't know. 18% of the selected samples were said mostly false, 3% of the selected sample were said definitely false. The majority were said definitely true.

b. I am as healthy as anybody I know

Table – 36

Valid	Scoring	Number	Percentage
Definitely True	4	10	26
Mostly True	3	13	33
Don't Know	2	8	21
Mostly False	1	6	15
Definitely False	0	2	5
	Total	39	100

Figure – 36



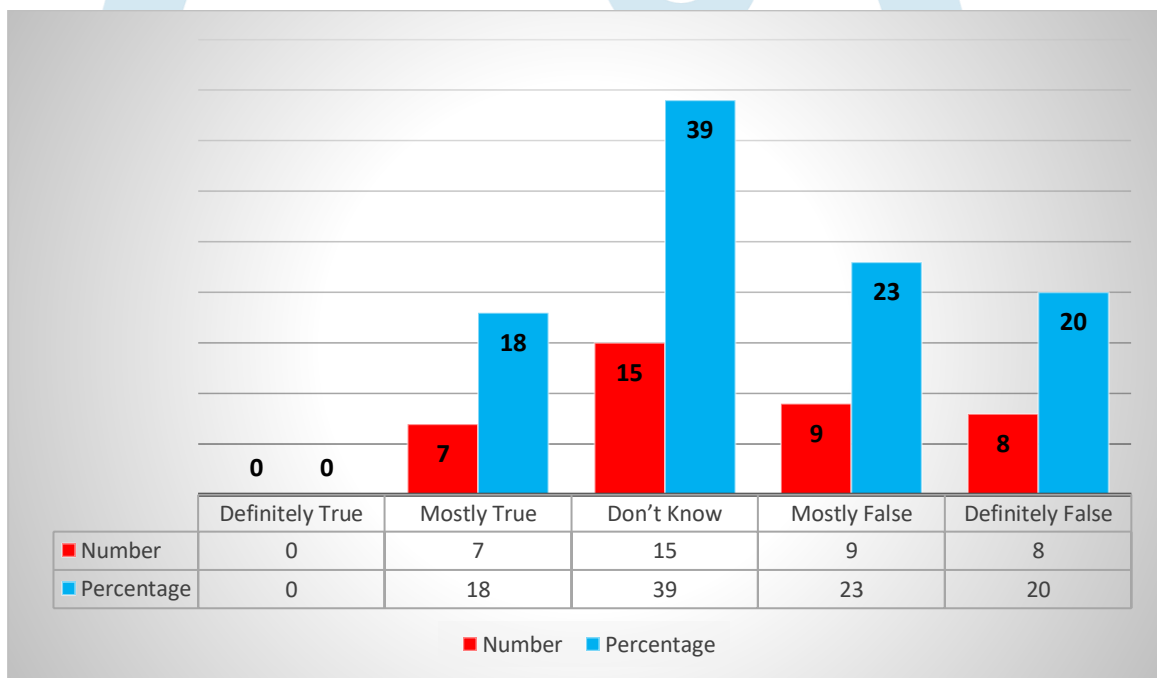
The above table 36 and figure 36 reveals the I am as healthy as anybody I know of the selected samples. 26% of the selected samples were said definitely true, 33% of the selected sample were said mostly true, 21% of the selected sample were said don't know. 15% of the selected samples were said mostly false, 5% of the selected sample were said definitely false. The majority were said mostly true.

c. I expect my health to get worse

Table – 37

Valid	Scoring	Number	Percentage
Definitely True	4	-	-
Mostly True	3	7	18
Don't Know	2	15	39
Mostly False	1	9	23
Definitely False	0	8	20
	Total	39	100

Figure – 37



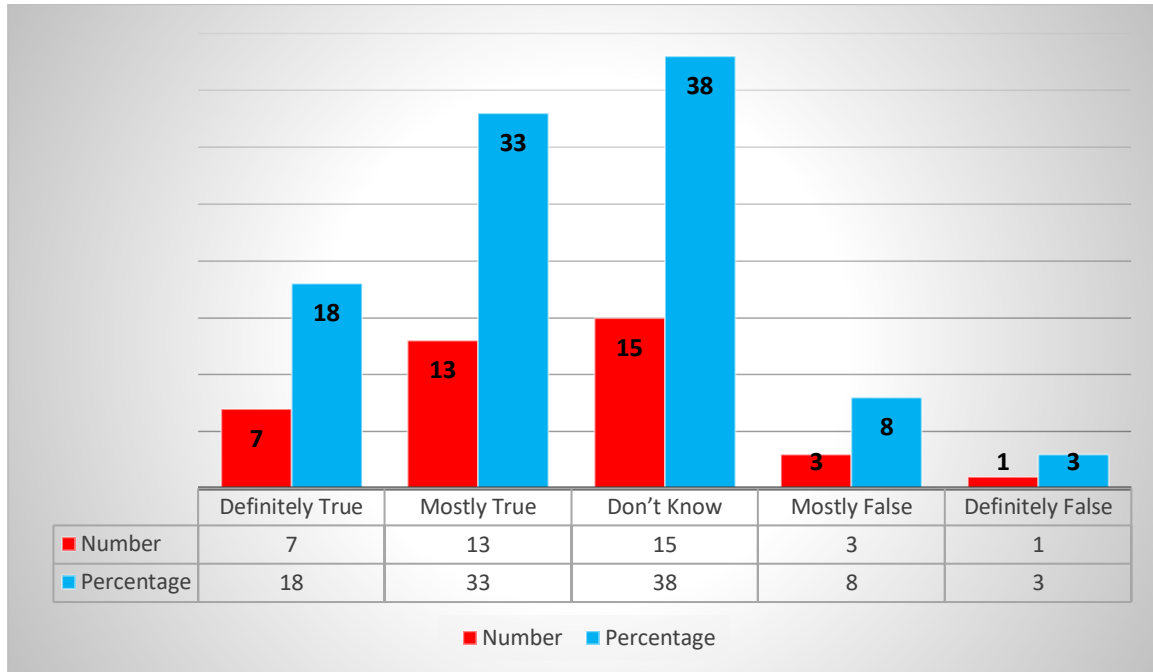
The above table 37 and figure 37 reveals the I am as healthy as anybody I know of the selected samples. 18% of the selected sample were said mostly true, 39% of the selected sample were said don't know. 23% of the selected samples were said mostly false, 20% of the selected sample were said definitely false. The majority were said don't know.

d. My health is excellent

Table – 38

Valid	Scoring	Number	Percentage
Definitely True	4	7	18
Mostly True	3	13	33
Don't Know	2	15	38
Mostly False	1	3	8
Definitely False	0	1	3
	Total	39	100

Figure – 38



The above table 38 and figure 38 reveals my health is excellent of the selected samples. 18% of the selected samples were said definitely true, 33% of the selected sample were said mostly true, 38% of the selected sample were said don't know. 8% of the selected samples were said mostly false, 3% of the selected sample were said definitely false. The majority were said don't know.

Positive outcomes based on comparison KDOoL SF 36V2

Q4 vs Q5

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

VS

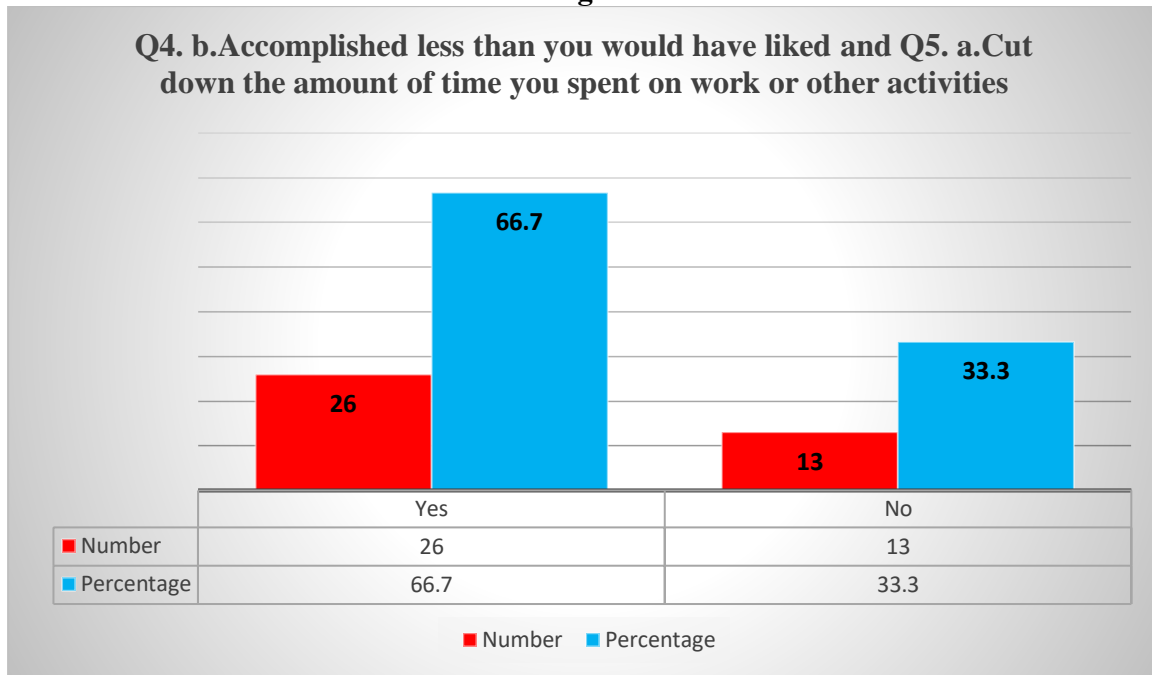
During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

Comparison 1: Q4. b. Accomplished less than you would have liked and Q5. a. Cut down the amount of time you spent on work or other activities

Table – 39

Q4. b. Accomplished less than you would have liked and Q5.a.Cut down the amount of time you spent on work or other activities	Number	Percentage	P Value	Results
Yes	26	66.7	.010	Significant
No	13	33.3		
Total	39	100		

Figure – 39



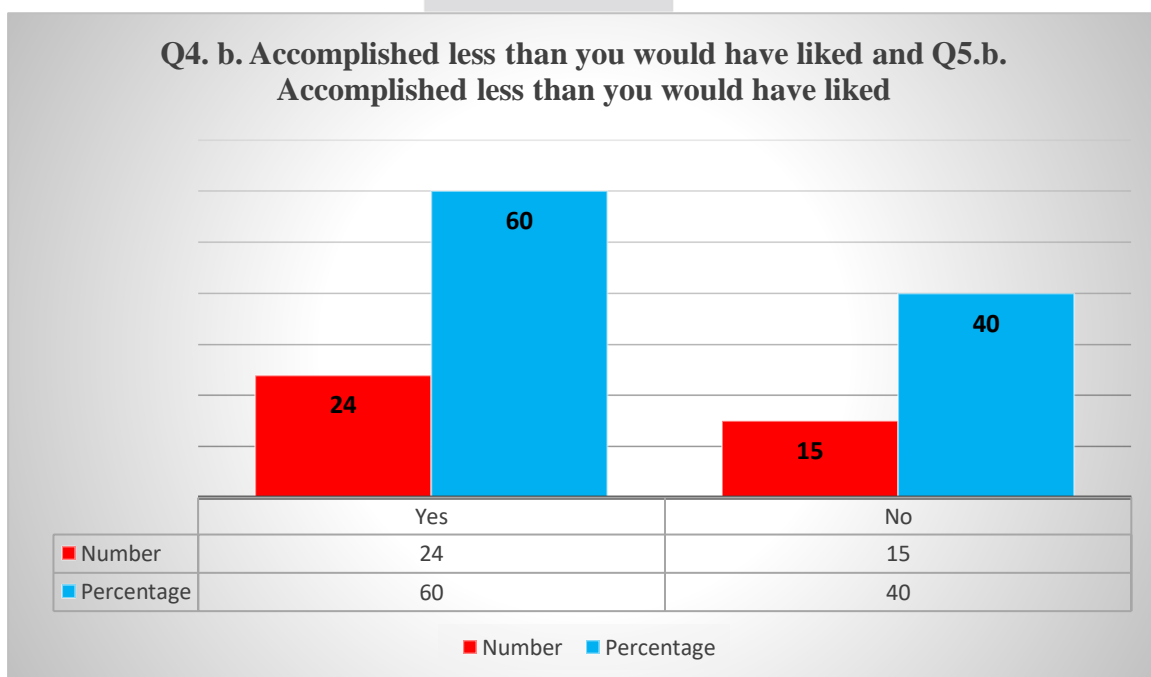
The above table 39 and figure 39 reveals the Comparison 1: Q4. b. Accomplished less than you would have liked and Q5. a. Cut down the amount of time you spent on work or other activities of the selected samples. In This 66.7% had emotional problem such as feeling depressed or anxious affect the physical health accomplished less in regular daily activities. There was high significant in the comparison 1. (P=.010).

Comparison 2: Q4. b. Accomplished less than you would have liked and Q5. b. Accomplished less than you would have liked

Table – 40

Q4. b. Accomplished less than you would have liked and Q5.b. Accomplished less than you would have liked	Number	Percentage	P Value	Results
Yes	24	60	.03	Significant
No	15	40		
Total	39	100		

Figure – 40



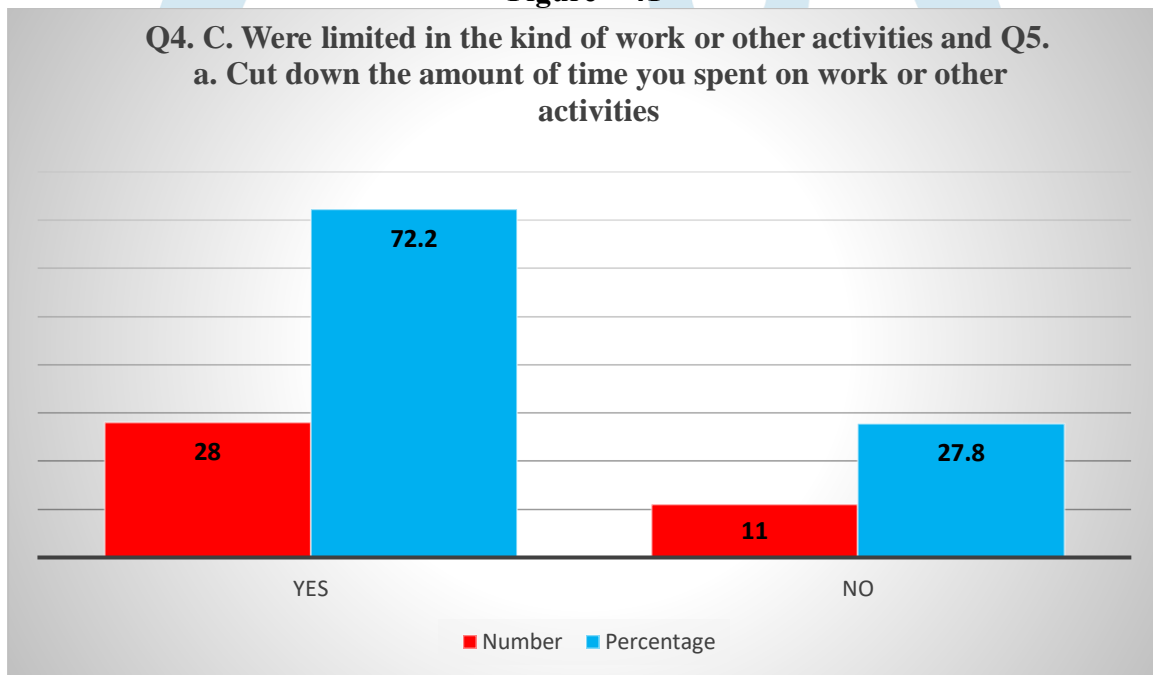
The above table 40 and figure 40 reveals the Comparison 2: Q4. b. Accomplished less than you would have liked and Q5.b. Accomplished less than you would have liked of the selected samples. In this 60% had both physical and accomplished less in regular activities. There was high significant in the comparison 2. (P=.03)

Comparison 3: Q4. C. Were limited in the kind of work or other activities and Q5. a. Cut down the amount of time you spent on work or other activities

Table – 41

Q4. C. Were limited in the kind of work or other activities and Q5. a. Cut down the amount of time you spent on work or other activities	Number	Percentage	P Value	Results
Yes	28	72.2	<.001	Significant
No	11	27.8		
Total	39	100		

Figure – 41



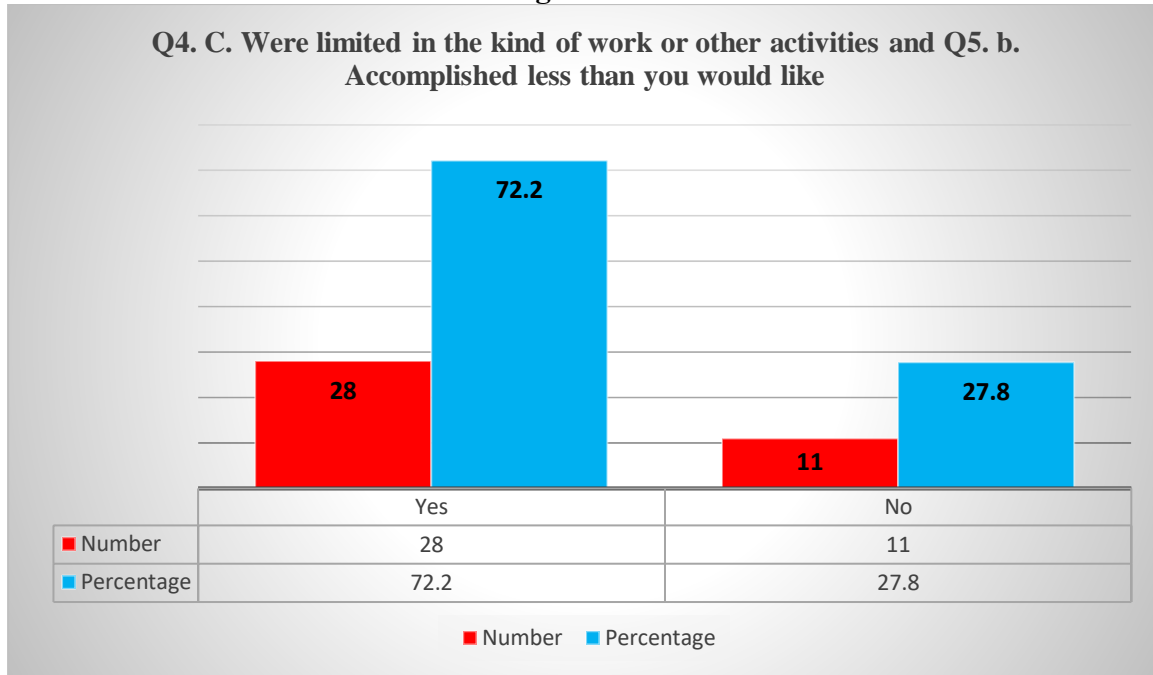
The above table 41 and figure 41 reveals the Comparison 3: Q4. C. Were limited in the kind of work or other activities and Q5. a. Cut down the amount of time you spent on work or other activities of the selected samples. In this 72.2% had emotional problems which cut down the amount of time spent on work affect the physical health were limited in the kind of work. There was high significant in the comparison 3. (P<.001)

Comparison 4: Q4. C. Were limited in the kind of work or other activities and Q5. b. Accomplished less than you would like

Table – 42

Q4. C. Were limited in the kind of work or other activities and Q5. b. Accomplished less than you would like	Number	Percentage	P Value	Results
Yes	28	72.2	<.001	Significant
No	11	27.8		
Total	39	100		

Figure – 42



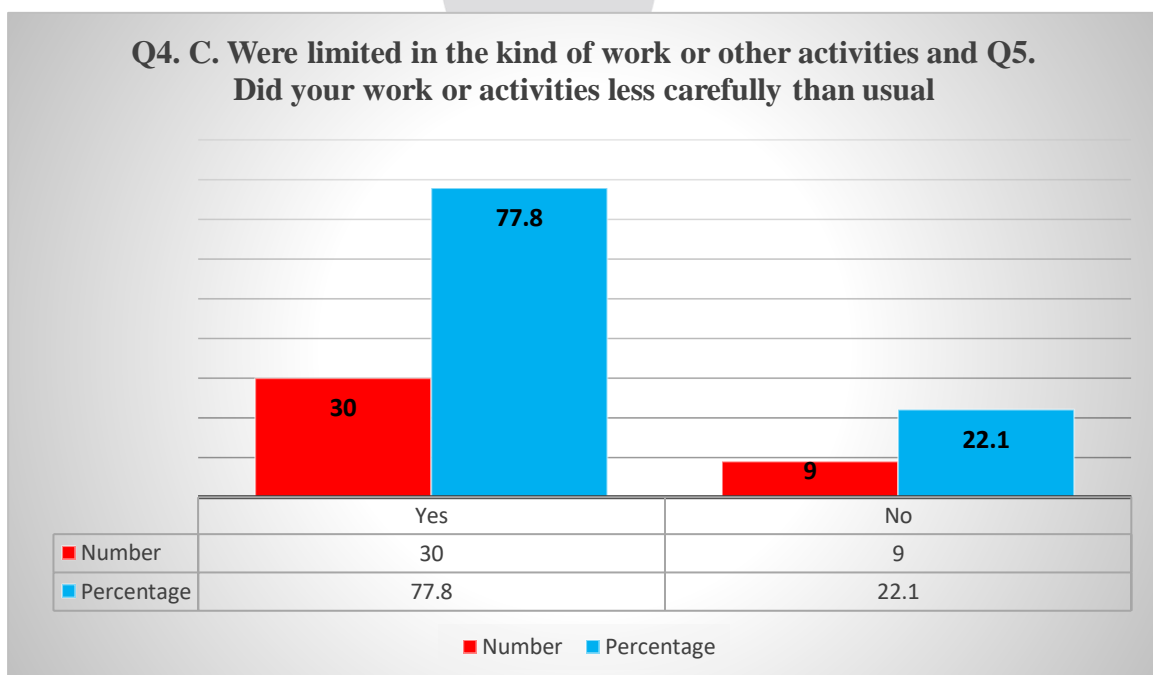
The above table 42 and figure 42 reveals the Comparison 4: Q4. C. Were limited in the kind of work or other activities and Q5. b. Accomplished less than you would like of the selected samples. In this 72.2% had physical health limited in the kind of work affect accomplished less due to emotional problems. There was high significant in the comparison 4. (P<.001)

Comparison 5: Q4. C. Were limited in the kind of work or other activities and Q5. Did your work or activities less carefully than usual

Table – 43

Q4. C. Were limited in the kind of work or other activities and Q5. Did your work or activities less carefully than usual	Number	Percentage	P Value	Results
Yes	30	77.8	.003	Significant
No	9	22.1		
Total	39	100		

Figure – 43



The above table 43 and figure 43 reveals the Comparison 5: Q4. C. Were limited in the kind of work or other activities and Q5. C. Did your work or activities less carefully than usual of the selected samples. In this 77.8% had physical problems limited in the kind of work due to affect emotional problems did your work or activities less carefully than usual. There was high significant in the comparison 5. (P=.003).

Q7 VS Q8

How much bodily pain have you had during the past 4 weeks?

VS

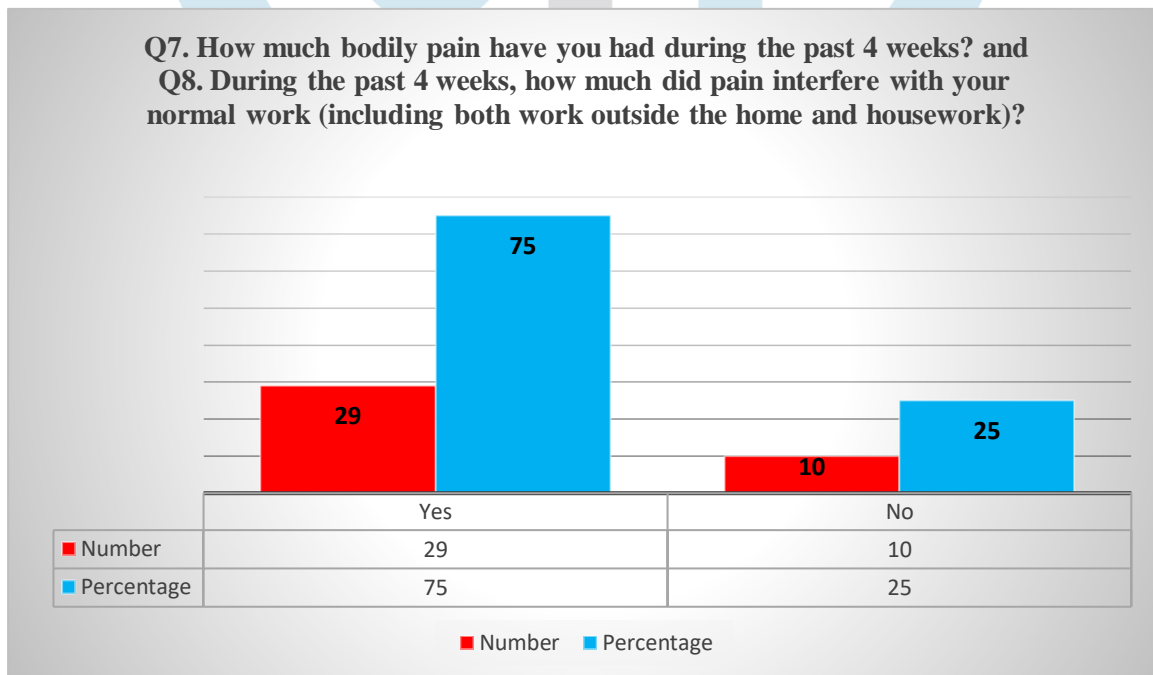
During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Comparison 6:

Table – 44

Q7. How much bodily pain have you had during the past 4 weeks? and Q8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?	Number	Percentage	P Value	Results
Yes	29	75	<.001	Significant
No	10	25		
Total	39	100		

Figure – 44



The above table 44 and figure 44 reveals the Comparison 6: Q7. How much bodily pain have you had during the past 4 weeks? and Q8. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)? Of the selected samples. In this 75% had body pain during the past 4 week and how much did pain interfere with your normal work. There was high significant in the comparison 6 (P<.001)

Q11. How TRUE or FALSE is each of the following statements for you?

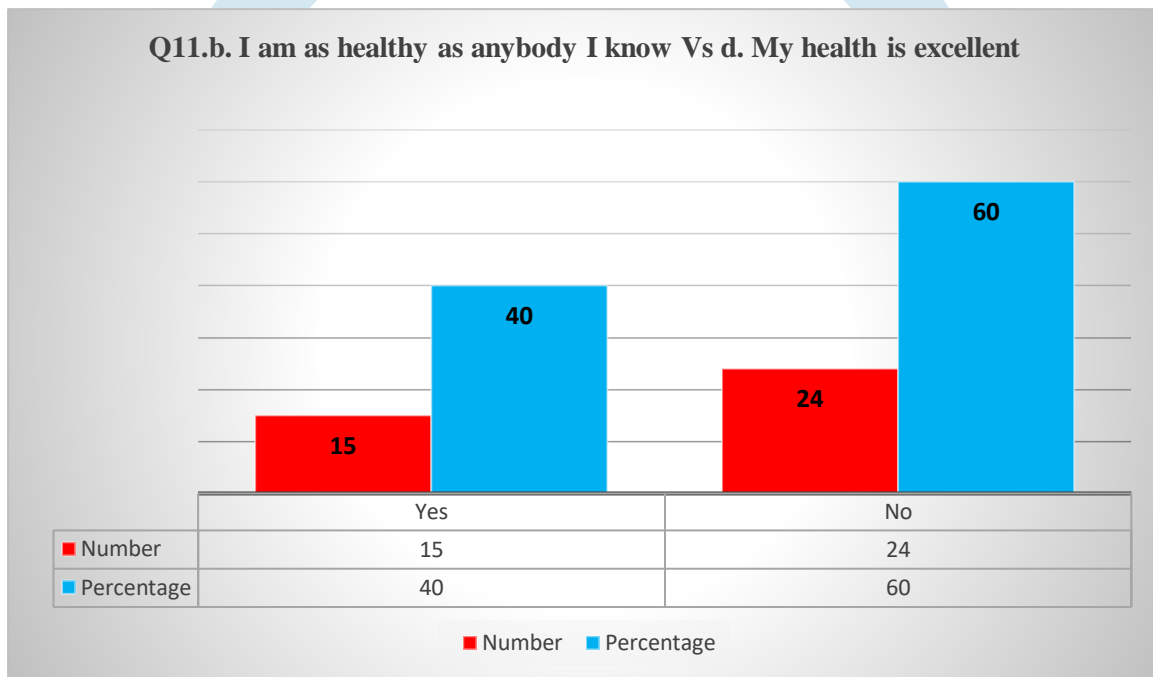
b. I am as healthy as anybody I know Vs d. My health is excellent

Comparison 7:

Table – 45

Q11. b. I am as healthy as anybody I know and d. My health is excellent	Number	Percentage	P Value	Results
Yes	15	40	.004	Significant
No	24	60		
Total	39	100		

Figure – 45



The above table 45 and figure 45 reveals the Comparison 7: Q11. b. I am as healthy as anybody I know and d. My health is excellent. In this 40% said that their health was excellent and as healthy as anybody I know. There was high significance in the comparison 7. (P=.004).

Based on the Result and Comparison of KDQoL SF 36 V1.2:

Several studies revealed that mental health, physical symptoms, and physical conditioning interact to affect health-related QOL. In this study, we noticed that nutritional parameters were found to determine impaired health-related QOL in HD patients as evaluated by scores on the KDQOL-SF-36

Many health-education interventions for hemodialysis patients have been implemented, covering various themes such as physical exercise, medication adherence, and nutrition. Systematic reviews have been conducted on the impact of education in general (10) and specific themes (11). However, to date, no review has specifically examined the impact of nutrition education on hemodialysis patients.

Medical Nutrition Education:

Based on this survey we conducted the medical nutrition education session with a team support of medical professionals and clinical dietitians. Nutritional Counselling was given frequently to patients and their family members.

Participants:

- Patients along with their family members/ care takers were participated.
- Medical professionals (doctor, nurse, psychiatrist, clinical dietician)
- One on one counselling was given to patient and their family members.

In this education session we discussed:

Physical problem of selected samples

Emotional problem of selected samples

How to overcome from those problem

Family support

Health care profession supports

Follow up

Regulate the regular counselling

The specific nutrition education was to assess the impact of nutrition education on patients undergoing hemodialysis

Effect of Nutrition Education on the Quality of Life of Hemodialysis Patients

Quality of life is a crucial health outcome and represents the ultimate goal of all health interventions (12).

Our study empirically confirmed the positive impact of nutrition education on hemodialysis patients, addressing several critical aspects. These findings underscore the importance of healthcare providers incorporating nutrition education into the standard treatment for hemodialysis patients (13).

Conclusion:

The findings of the study demonstrated that there was a significant decrease in HRQoL in CKD Patients and it also revealed CKD imposes various restrictions on patients physical and mental functioning.

CKD places restrictions on patients' daily lives, particularly in physical and mental functioning, even in the early stages. Patients must actively manage their condition and maintain optimism for improved Quality of Life (QoL). The disease's impact extends to the patients' families, who also require ongoing information and support. Healthcare professionals should be aware of these effects and provide guidance for better daily living. Emphasis should be placed on psychosocial and medical therapies to enhance QoL in CKD patients. Despite limitations including a small sample size and single-center investigation, this study highlights the link between CKD and HRQoL, emphasizing the importance of assessing HRQoL in CKD patients. Timely interventions to improve HRQoL can significantly benefit patient health.

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