

**CHAPTER 4**  
**CASE STUDY – RAFAH-PALESTINE**

## Chapter 4: Case study – Rafah, Palestine

### 4.1 The study methodology:

The researcher used the descriptive field by filling the form through the interviews that were conducted with the study sample consisting of physically disabled in Rafah in the Gaza Strip. The visit has disabled places where they live and preview the interior spaces of the residential buildings and explore what it actually complain of problems of architectural.

### 4.2 Community case study:

The study sample consisted of the category of the physically disabled who live in Rafah Was selected as the sample by the following points:

- The distribution of the different residential areas in Rafah.
- Age groups where divided into two categories:
  1. 17 years old and younger.
  2. More than 17 years.

### 4.3 The study sample:

After coordination with the Palestinian Ministry of Health and associations of disabled care, Researcher got the complete lists of officially registered disabled, Menus have included all types of disabilities.

Thus, the researcher archive of data and then determine the physical disabilities are the target group for the study.

Included lists for the disabled

- Full name
- Phone number
- Home address
- Identify the type of physical disabled.

Installed a schedule to visit all the disabled and mentioned that during the visit of each area in a specific time period.

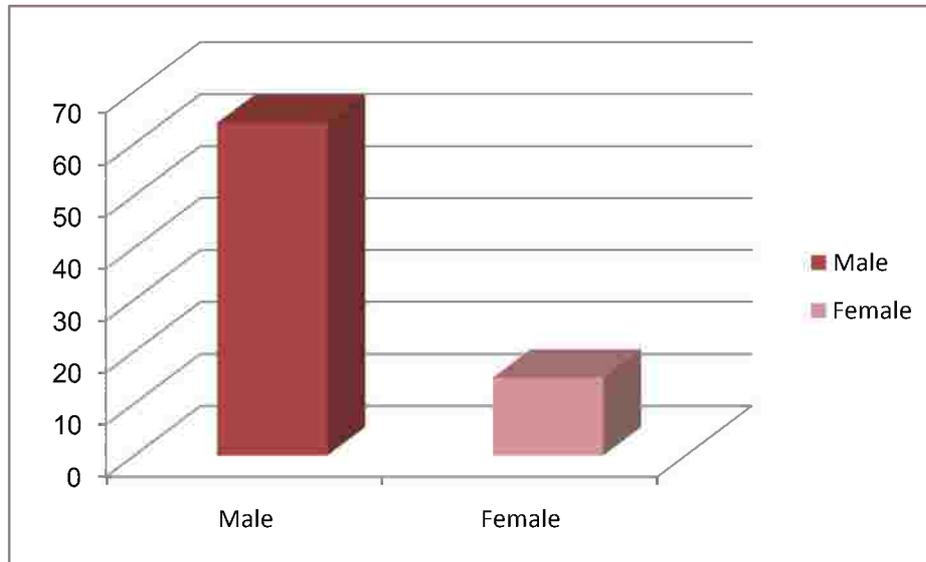
Then scheduling with the disabled person or his/her family home for a visit and that prior coordination by telephone to determine the date.

The total number of the study sample, 79 cases from Rafah ,the following tables describes this:

- 1- The number of males 64 cases and the number of females 15 cases.

**Table 4- 1 Distribution of the study sample by gender**

| Gender | Repetition | Percentage |
|--------|------------|------------|
| Male   | 64         | 81         |
| Female | 15         | 19         |
| Total  | 79         | 100        |

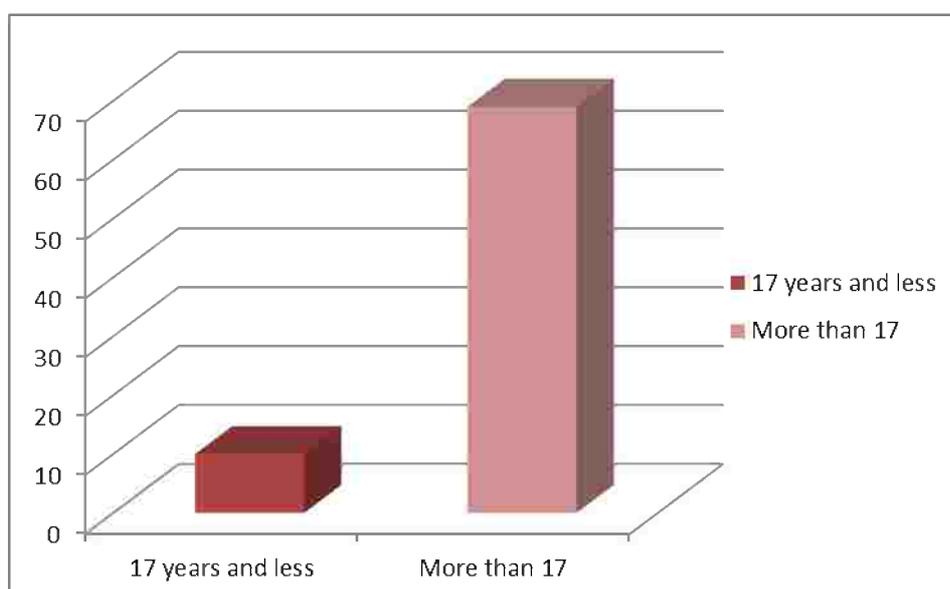


**Figure 4- 1 Distribution of the study sample by gender**

- The number of children aged 17 years and below 10 cases at a rate of 12.6%.
- The number of people aged More than 17 years 69 cases at a rate of 87.3%.

**Table 4- 2 Sample Distribution by age group**

| Age group         | Repetition | Percentage |
|-------------------|------------|------------|
| 17 years and less | 10         | 12.6       |
| More than 17      | 69         | 83.4       |
| Total             | 79         | 100        |



**Figure 4- 2 Sample Distribution by age group**

#### 4.4 Study Tool :

The researcher developed a questionnaire study with the help of specialists in statistics by the Central Bureau of Statistics Palestinian.

Category specialized the form and the disabled are filled with a disabled person.

- The first part of the form with the information for the disabled demographic in terms of name, age, type of injury.
- The second part of the form specialized architectural constraints that may be facing the disabled in dealing with the interior spaces of the house.
- Part III of Form specialized medical assistance and architectural needed by disabled inside the house to facilitate the movement of natural.
- Form consists of 23 questions answered by the disabled.

#### 4.5 Statistical processing of the sample:

The study was conducted and the process of filling the questionnaire according to the following steps:

1. The preparation of the final study tool and make adjustments to reach the best form.
2. Identify members of the study sample.
3. Select multiple locations in Rafah to conduct survey.
4. Doing exploratory study by applying the form on the two individuals from the sample to discover any difficulty in completing the form and check sequence to access the benefits of the objectives of the study.
5. Sort preset schedule with a disability and his family to conduct the interview by phone
6. Visiting researcher in the field of cases has also answered fill out the form specifically disabled.
7. Questionnaire was compiled after work interviews and inserted into the computer and processed statistically using the program of statistical (SPSS)

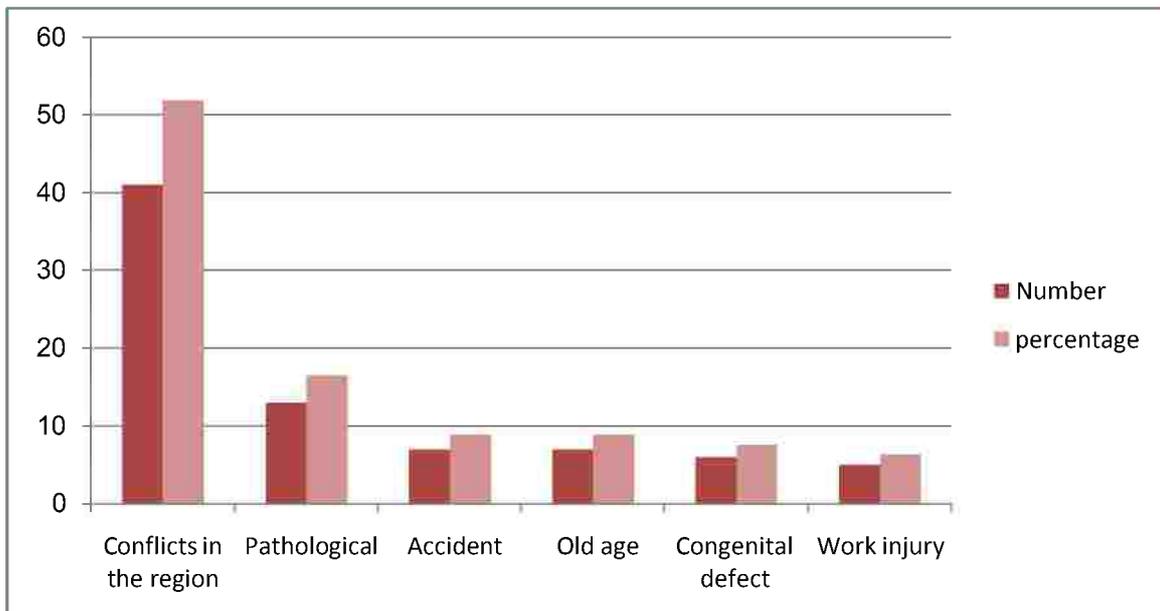
#### 4.6 Results of the study:

1. The sample of the study amounted to 79 cases which were selected from Rafah.
2. The number of males amounted to 64 cases, while the number of females was 15 cases .
3. The number of children aged 17 years and below were 10 cases with a percentage of 12.6% .
4. Number of those aged 18 and more were 69 cases with a percentage of of 87.3%.
5. During the study it was established that the highest proportion of disability causes was the result of Conflicts in the region measures with a percentage reaching 51.9% of the total sample.

Distribution of disability by cause:

**Table 4 -3 Distribution of disability by cause**

| Cause of disability            | Number | percentage |
|--------------------------------|--------|------------|
| <b>Conflicts in the region</b> | 41     | 51.9       |
| <b>Pathological</b>            | 13     | 16.5       |
| <b>Accident</b>                | 7      | 8.9        |
| <b>Old age</b>                 | 7      | 8.9        |
| <b>Congenital defect</b>       | 6      | 7.6        |
| <b>Work injury</b>             | 5      | 6.3        |



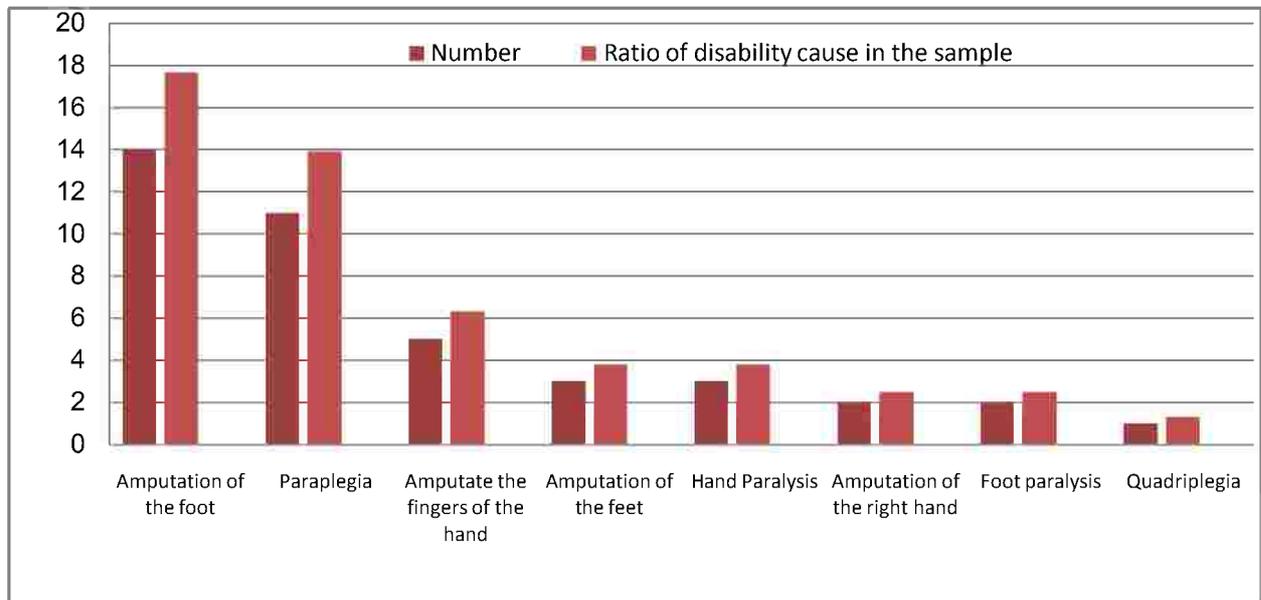
**Figure 4- 3Distribution of disability by cause**

6. The following table highlights the number of disabilities caused by Conflicts in the region measures 41 disabilities out of the total sample with a percentage of of 51.
7. It was recognizable that the highest disabilities percentage caused by the Conflicts in the region measures was in the amputation of the foot, with a percentage of: 17.7 followed by Paraplegia with 13.9.

Cause of disability: Conflicts in the region measures

**Table 4 -4Cause of disability**

| Type of disability                      | Number | Ratio of disability cause in the sample |
|---|--------|---|
| <b>Amputation of the foot</b>           | 14     | 17.7                                    |
| <b>Paraplegia</b>                       | 11     | 13.9                                    |
| <b>Amputate the fingers of the hand</b> | 5      | 6.3                                     |
| <b>Amputation of the feet</b>           | 3      | 3.8                                     |
| <b>Hand Paralysis</b>                   | 3      | 3.8                                     |
| <b>Amputation of the right hand</b>     | 2      | 2.5                                     |
| <b>Foot paralysis</b>                   | 2      | 2.5                                     |
| <b>Quadriplegia</b>                     | 1      | 1.3                                     |
| <b>Total</b>                            | 41     | 51.9                                    |



**Figure 4- 4 Cause of disability**

8. During the study it was established that the highest percentage of disability was amputation of one of the feet, reaching 32.9% and Paraplegia 26.6%.

**Table 4-5 Ratio of disability cause in the sample**

| Type of disability                                   | Number | Ratio of disability cause in the sample |
|--|--------|---|
| <b>Amputation of the foot</b>                        | 26     | 32.9                                    |
| <b>Paraplegia</b>                                    | 21     | 26.6                                    |
| <b>Amputate the fingers of the hand</b>              | 8      | 8.9                                     |
| <b>Foot Paralysis</b>                                | 5      | 6.3                                     |
| <b>Hand Paralysis</b>                                | 5      | 6.3                                     |
| <b>Feet Amputation</b>                               | 4      | 5.1                                     |
| <b>Right hand amputation</b>                         | 4      | 5.1                                     |
| <b>Quadriplegia</b>                                  | 4      | 5.1                                     |
| <b>Left hand amputation</b>                          | 1      | 1.3                                     |
| <b>Cerebral palsy</b>                                | 1      | 1.3                                     |
| <b>Upper Diplegia (Paralysis of the upper limbs)</b> | 1      | 1.3                                     |
| <b>Total</b>   | 41     | 51.9                                    |

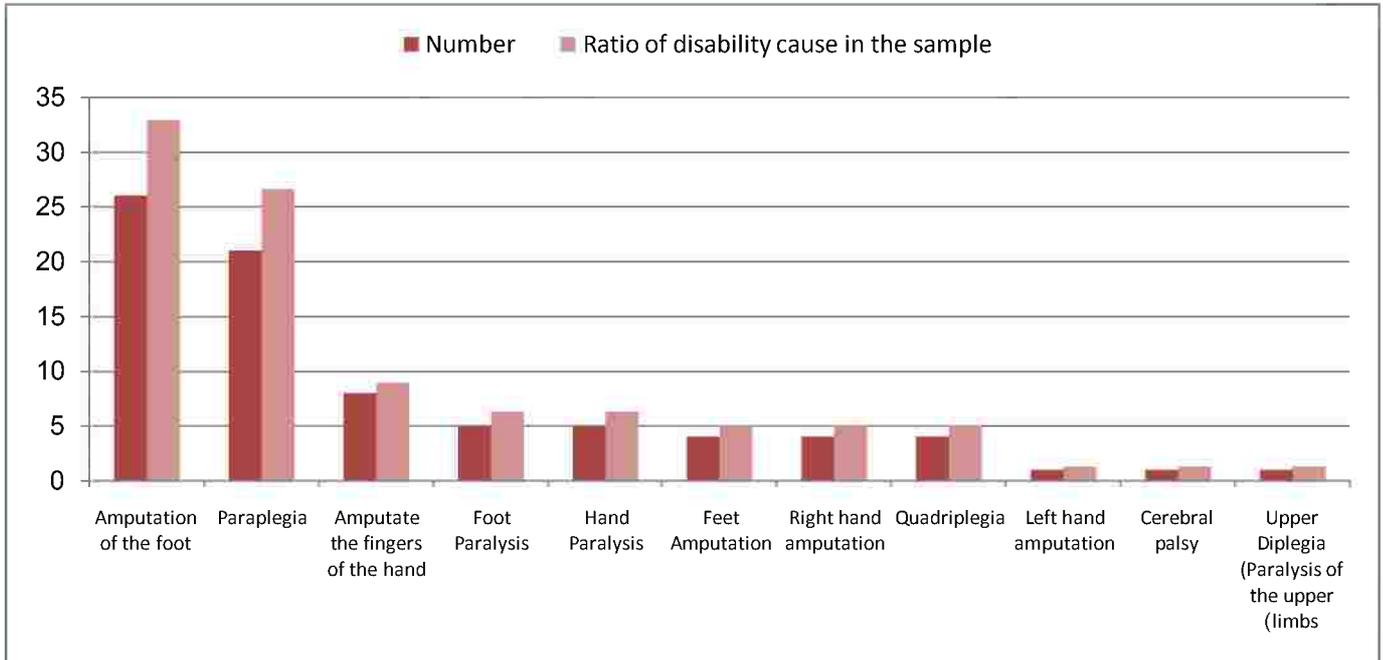


Figure 4- 5Ratio of disability cause in the sample

9. Number of people who have a disability at the lower part of their bodies: 60 persons  
 Those who find it difficult to move inside the house: 49 with a percentage of 81.6%.  
 People who have a disability at the lower part of their bodies and finding it difficult to move inside the house:

Table 4- 6who find it difficult to move inside the house

| Type of Disability     | Number |
|------------------------|--------|
| Amputation of the feet | 20     |
| Amputation of the foot | 19     |
| Foot paralysis         | 4      |
| Quadriplegia           | 3      |
| Paraplegia             | 3      |

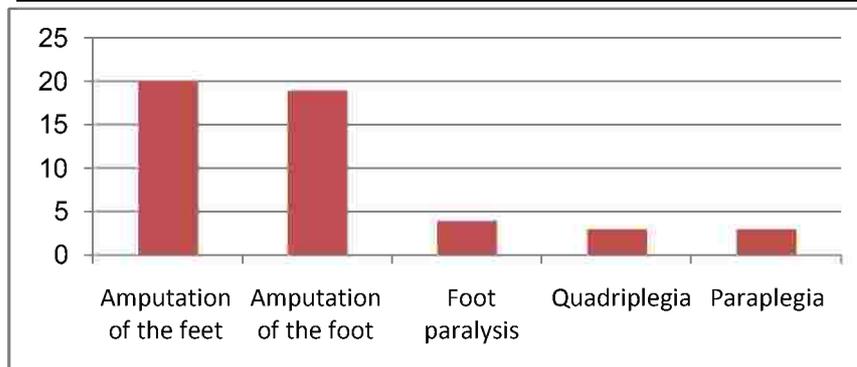
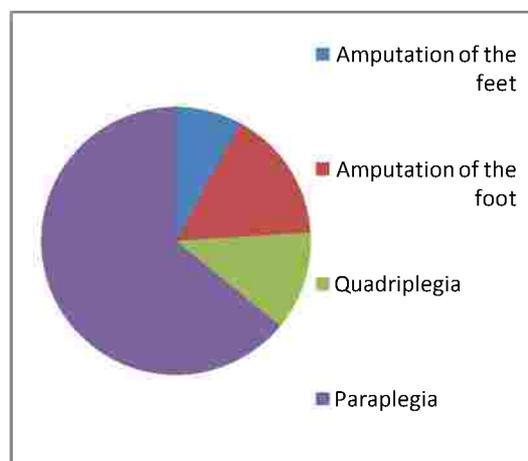


Figure 4- 6who find it difficult to move inside the house

10. The proportion of people who suffer from a disability in the feet, the lower part of the body and quadriplegia amount to: 76% and those who need a wheelchair amount to 34.2%.

**Table 4- 7 who suffer from a disability in the feet,**

| Type of Disability     | Percentage |
|------------------------|------------|
| Amputation of the feet | 2.5        |
| Amputation of the foot | 5.1        |
| Quadriplegia           | 3.8        |
| Paraplegia             | 20.3       |

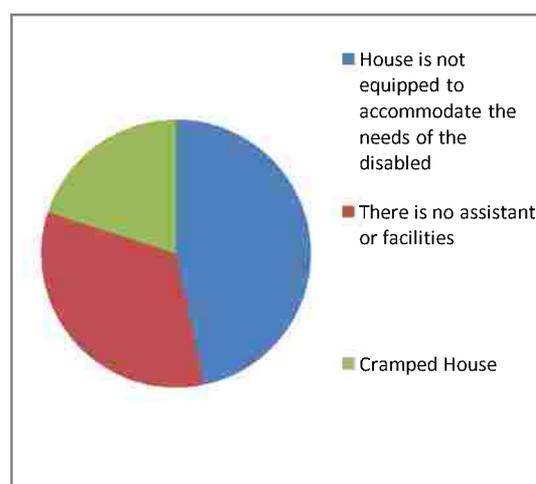


**Figure 4- 7The proportion of people who suffer from a disability in the feet**

11. During the study it was established that those who find it difficult to move inside the house were 15 cases and it was found that the highest percentage of having difficulty of moving inside the house was because the house is not equipped to accommodate the needs of the disabled which amounted to 46.6%.

**Table 4- 8 Type difficulty of moving inside the house**

| Type difficulty of moving inside the house                     | Number |
|--|--------|
| House is not equipped to accommodate the needs of the disabled | 7      |
| There is no assistant or facilities                            | 5      |
| Cramped House  | 3      |

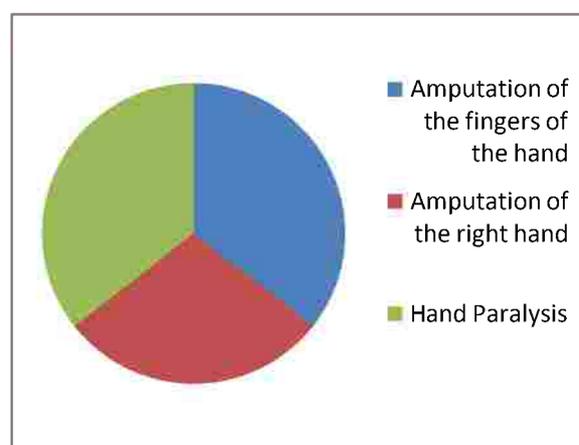


**Figure 4- 8Type difficulty of moving inside the house.**

12. The percentage of those who have a hand disability amounts to 22.9% while the percentage of those who have difficulty using Kitchenware amounts to 17.7%.

**Table 4- 9 who have difficulty using Kitchenware**

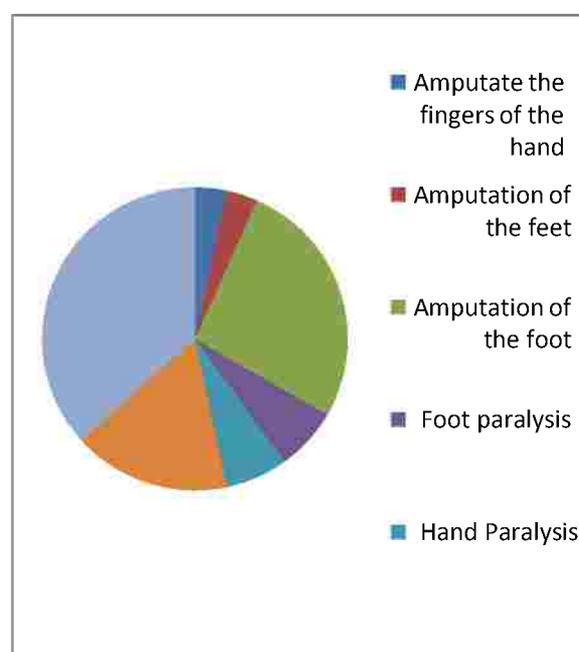
| Type of Disability                    | percentage |
|---------------------------------------|------------|
| Amputation of the fingers of the hand | 6.3        |
| Amputation of the right hand          | 5.1        |
| Hand Paralysis                        | 6.3        |

**Figure 4- 9who have difficulty using Kitchenware**

13. During the study it was established that the percentages of those who have difficulty using the toilets amount to: 30, with a percentage of 37.9%.

**Table 4- 10 Those who have difficulty using the toilet**

| Type of Disability               | Number |
|----------------------------------|--------|
| Amputate the fingers of the hand | 1      |
| Amputation of the feet           | 1      |
| Amputation of the foot           | 8      |
| Foot paralysis                   | 2      |
| Hand Paralysis                   | 2      |
| Cerebral palsy                   | 5      |
| Paraplegia                       | 11     |

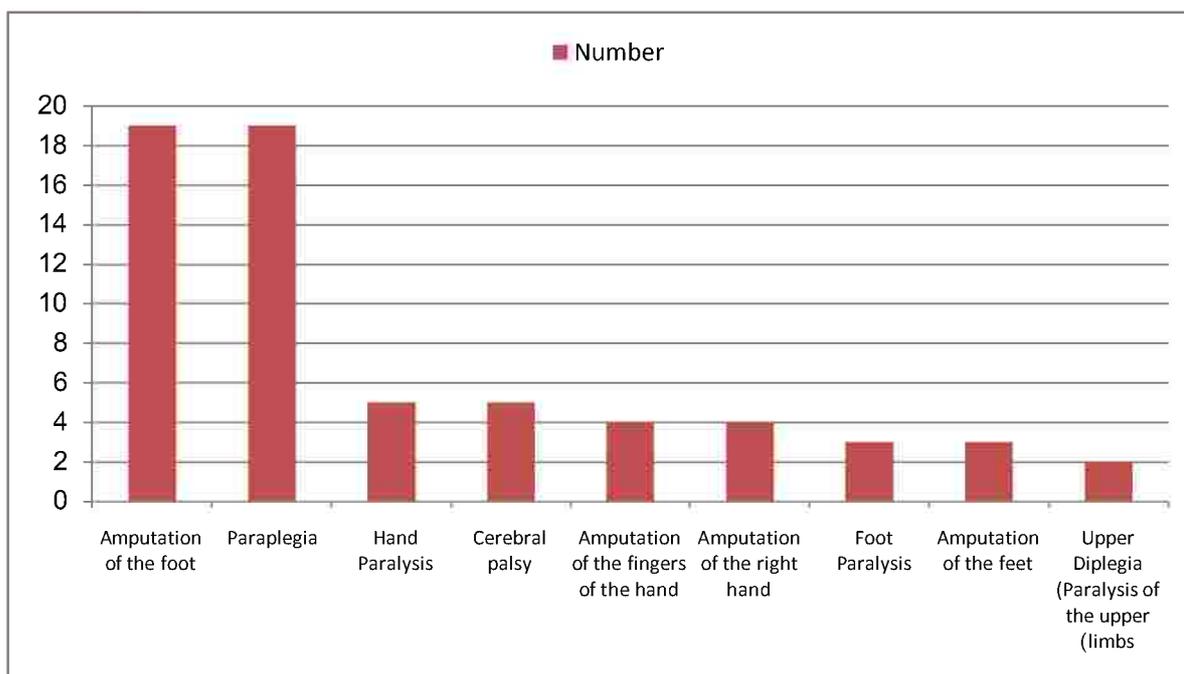
**Figure 4- 10Those who have difficulty using the toilet**

14. During the study it was established that the percentage of those who find it difficult to wear their clothes amount to 62 with a percentage of 78.4%.

**Table 4- 11 Those who find it difficult to wear their clothes**

| Type of Disability                    | Number |
|---------------------------------------|--------|
| Amputation of the foot                | 19     |
| Paraplegia                            | 19     |
| Hand Paralysis                        | 5      |
| Cerebral palsy                        | 5      |
| Amputation of the fingers of the hand | 4      |
| Amputation of the right hand          | 4      |

|   |   |
|---|---|
| Foot Paralysis                                | 3 |
| Amputation of the feet                        | 3 |
| Upper Diplegia (Paralysis of the upper limbs) | 2 |



**Figure 4- 11** Those who find it difficult to wear their clothes

15. During the study it was established that the percentage of those who need help eating amounts to 27 with a percentage of 34%.

**Table 4- 12** who need help eating

| Type of Disability                            | Number |
|---|--------|
| Amputation of the foot                        | 5      |
| Cerebral palsy                                | 5      |
| Amputation of the right hand                  | 4      |
| Paraplegia                                    | 4      |
| Amputation of the fingers of the hand         | 3      |
| Hand Paralysis                                | 3      |
| Foot Paralysis                                | 2      |
| Upper Diplegia (Paralysis of the upper limbs) | 1      |

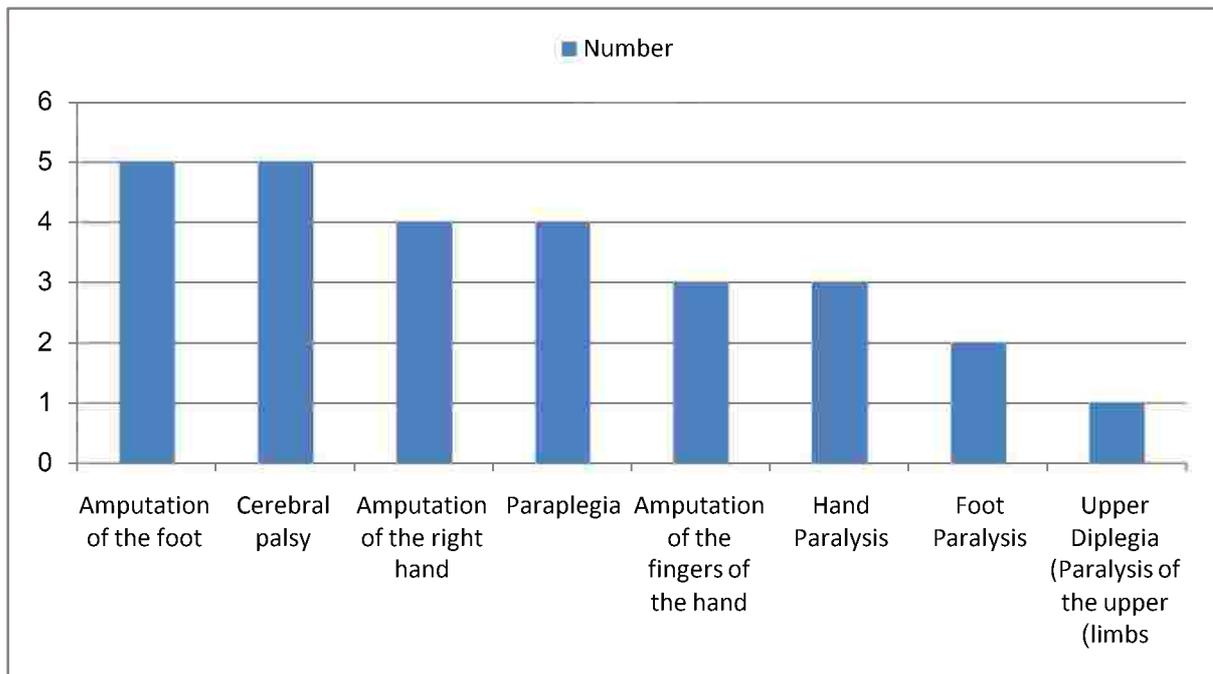


Figure 4- 12 who need help eating

#### 4.7 Difficulties during the study:

The researcher faced several difficulties during the conduct of the study, and the most important: rejection of the idea of the number of disabled interviews, for many reasons, of which; frequent institutions. The people who conducted them to meetings and interviews, and reflected by asking them for the benefit, or fill in the form of rejection of packaged without clarifying the reasons for it.

- disparity in the level of education for the disabled, forcing the researcher to re-question.
- addressed in some of the interviews to their own problems (families, disabled)

#### 4.8 a result of visits for residential homes:

In the current time, a lot of international associations and institutions are supporting the physically disabled people in Rafah camp by rehabilitation and the architectural spaces' restoration's project in the handicapper's house especially in the bathrooms or water- closet, but this restoration mostly be without following the qualifications of designing or the international standards for the handicapped person and without correct basis.

The following pictures in the figure show the restorations of some spaces in Rafah camp within one of these projects.

**The first Home:**(notice All images in the same space architect- march 2014)

| Before rehabilitation  | After rehabilitation   |
|--|--|
|           |    |
| <p>Figure 4-13 (source-household 1)</p>  | <p>Figure 4-14 (source-household 1)</p>  |
|          |   |
| <p>Figure 4-15 (source-household 1)</p>  | <p>Figure 4-16 (source-household 1)</p>  |
|         |  |
| <p>Figure 4-17 (source-household 1)</p>  | <p>Figure 4-18 (source-household 1)</p>  |
| <p><b>The second Home:</b> (notice All images in the same space architect- march 2014)</p> |  |

| Before rehabilitation  | After rehabilitation  |
|--|---|
|   |   |
| Figure 4-19 (source-household 2)   | Figure 4-20 (source-household 2)  |
|  |  |
| Figure 4-21 (source-household 2)   | Figure 4-22 (source-household 2)  |

**In conclusion, the researcher through this study concludes the range of the spacing between the geometrical standards and the actual implementation on the ground in Rafah.**