

**A Survey of People with Special Needs at 27 Palestinian
Villages in Tulkarm and Qalqilia Districts**

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Union of Health Care Committees

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Preface

This study is fulfilling a request from Union of Health Care Committees (UHCC) to implement the Community Based Rehabilitation project at 27 Palestinian villages in Tulkarm and Qalqilia Districts in the period between 25 March 2005 and 25 March 2006. The project was funded by Gobierno De Cantabria and implemented in cooperation with the foundation PTM Mundubat (Peace and the Third World), Spain.

UHCC is a Palestinian health NGO that was founded in 1985. It aims at promoting the social and health aspects for the Palestinian society. It focuses on marginalized areas (rural & remote areas) and groups. Special attention is given to those less fortunate in society particularly women, children, students, workers, and those of social needs. UHCC pursue its mission through different health programs and activities. It implements many programmes throughout the West Bank and Gaza Strip.

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List of Abbreviations

CBR: Community Based Rehabilitation

DAR: WHO Disability and Rehabilitation Team.

MoH: Ministry of Health

MRC: Medical relief Committees

NGOs: Non-Governmental Organisations

PCBS: Palestinian Central Bureau of Statistics

PHC: Primary Health Care

PRCS: Palestinian Red Crescent Society

PTM Mundubat: Paz y Tercer Mundo-Hirugarren Mundua ta Bakea (Peace and the Third World).

UHCC: Union of Health Care Committees

UNDP: United Nations Development Programme.

WHO: World Health Organisation

Executive summary

This survey was conducted to collect data on prevalent disabilities and on the different characteristics of those with special needs in 27 villages afflicted by the Annexation Wall in Tulkarm (11 villages) and Qalqilia (16 villages) Districts in the northern parts of the West Bank. The reason behind it was to support the implementation of the CBR programme implemented by Union of Health Care Committees (UHCC) in that area. Data were collected through house to house survey in the period between August–September 2005 by using a structured questionnaire adapted from the WHO Manual on “Training Disabled within Community”. The total number of population under survey was 50,053 (27,831 persons in Tulkarm District and 22,222 persons in Qalqilia). This forms about 40% of the two Districts population and 2% of the West Bank population. The total number of families being visited during the survey in both Districts was 10,147 families. The response rate was about 97%. The main results of the survey are as follows:

Prevalence of disability

- ⊙ About 806 persons were identified as disabled by the CBR team in the studied villages; distributed as 405 cases (50.1%) in 16 villages in Qalqilia district and 401 cases (49.9%) in 11 villages in Tulkarm District.
- ⊙ The average disability rate in Qalqilia villages is (1.9%) while it is (1.5%) in Tulkarm. The highest rate of disability in Tulkarm District is found in Nazlet Issa (2.3%) and the lowest is found in Kafr Sour (0.8%). Whereas in Qalqilia the highest is in Farata (3.6%) and the lowest is in Jinsafut (1.0%).

Socio-demographic characteristic of disabled

- ⊙ The age distribution of the disabled persons is: 12.5% are less than 5 years old, 35.2% between 6-18 years old, and 52.2% are above the age of 18. This shows that children (less than 18 years) form 47.8% of the total disabled persons in the studied area.
- ⊙ Gender distribution of the disabled is 62.8% males and 37.2% female. However, underreporting of female disabilities might be possible.

Disability types, duration

- ⊙ Disabilities are distributed as follows: the largest is physical 34 % of the total cases, followed by mental 15.9%, speech 11.4 %, ophthalmic 10.9%, hearing 8.4%, learning difficulties 7.4%, and 7.2% compound disabilities.
- ⊙ The distribution of the type of disability by villages shows that the major type of disability, the physical, has the highest percentage in Qafin (13.5%) of the total number of disabilities in the village, learning difficulties in Ras Atyah (13.3%), ophthalmic difficulties in Baqa Al-Sharqiya (14.8%), hearing difficulties in Kafir Qadoum (17.6%), speech in Qafin (12%), and mental also in Qafin (12.5%).

- ⊙ The duration (years) of the disability is distributed as follows: 31.6% of the disabilities are less than 5 years, 42.2% more than 10 years, and 22% are between 6-10 years.

Integration in society

- ⊙ About 70% are participating in family activities whether always or sometimes
- ⊙ Only 60.4% are taking part in community activities whether always or sometimes.
- ⊙ 22.6% of the persons with disability can perform their daily activities (e.g. eating, drinking, wearing, cleansing) by themselves, 20.5% can perform them sometimes, and 20.8% of them are totally dependent on others for their daily activities.
- ⊙ 58.8% of those are at schooling age (6-18 years) and 1.2% of those above the age of 18 (in total 22.2% of the disabled persons) are enrolled at schools.
- ⊙ 55.4% of those who are less than 5 years old and 46.7% of those who are aged 6-19 can play normally or as youngsters.
- ⊙ Only 7.9% of the persons with disability have a job or income and 6.6% are having a job or income.

Families' socio-economic conditions

- ⊙ 94.5% of the families of the disabled have their own houses; only 3.5% have rented houses.
- ⊙ The average size of the families of disabled persons is 6.67 persons in comparison with the average size of the families in the West Bank 5.8 persons, and 6.2 persons per family in Palestine.
- ⊙ The average house size is 3 rooms, and the average number of persons per room at the disabled family houses is 2.2 persons.
- ⊙ 57.4% of the families of the disabled rated their income level as fair, 27.5% as bad, and 7.2% as good income level.
- ⊙ 37.8% of the families of the disabled have nobody working, 54.5% have only one person working and 7.7% have two or more persons working.

Parents' characteristics

- ⊙ The average age of the fathers of disabled persons is 45.2 years whereas the average age for mothers is 41.6 years.
- ⊙ Fathers have 8 years education in average while mothers have 4.4 years.
- ⊙ 38.3% of the fathers and 95% of the mothers (housewives) are unemployed.

Kinship degree among parents

- ⊙ 39% of the parents of the disabled persons are first degree relatives, 11.8% are second degree relatives, and 48.1% are not relatives. However, in this study no statistical significant relationship between the type of disability and the degree of kinship among parents was found ($p= 0.153$).

Availability of other disabled persons at family

- ⊙ 32.5% of the families have more than one disabled.
- ⊙ 51.9% of the first or second degree relative parents have more than one disabled child, and 42.0% of the first degree relative parents have another disabled child. Yet, no significant relationship between the availability of other disabled at the family in relationship with the degree of kinship among parents was found ($p= 0.468$).

Problems facing the disabled and family

- ⊙ The major problems facing the disabled persons is economic by 36%, followed by 26.7% as psychological, 5.7% as medical, 4.1% as social and 15% were related to other types of problems.
- ⊙ The major problems facing the family in taking care of the disabled is also related to economic problems 63.9%, psychological 10.5%, medical 5%, social 3.5%, and 8.1% of the families are facing other types of problems.

Perceptions and reasons of disability

- ⊙ 27.5% of the families attributed disability to congenital and genetic reasons, 23.7% to illness complications, 5.7% to medical errors, 4% to falling accidents, 2.5% to Intifada causalities, 2.4% to work accidents, 2.1% due to socio-cultural and religious beliefs (e.g. myths), and 2% to traffic accidents.
- ⊙ However, the reasons for disability according to the CBR team were as follows: 36.2% due to congenital and genetic, 27.3% illness complications, 6.7% falling accidents, 3.3% Intifada injuries, 2.6% traffic accidents, 2.2% work accidents, 1.6% medical errors, 15% were due to other reasons.

Disabled conditions

- ⊙ 90% of the disabled resides at home; only 1.4% of them stay at special institutions.
- ⊙ 44% of disabled persons are given support and care by their mothers, 3% by their brothers or sisters, 2% by their fathers, and 29.8% of them do not need special care.

Services provided for the disabled

- ⊙ As for the services received by the disabled persons, it was indicated that 60.5% of them received earlier care, 19% of them are currently receiving care, and 13.9% of them have not received any care.
- ⊙ The types of services the disabled persons are currently receiving are as follows 26.4% are medical services, 7.8% educational, 7.2% rehabilitation, and 5.5% physiotherapy. This shows the great focus on medical care and the less attention that is given to other types of services e.g. educational, rehabilitation, social and psychological care.
- ⊙ The sources of services provided for the disabled are: 48.5% local non-governmental institutions, 35.9% public (governmental) sector, and 3.2% international institutions.

Reasons for not receiving care

- ⊙ According to the families, the reasons for not receiving care are: 28% economic, 11.2% don't need care, 7.2% lack of services, 6.6% lack of knowledge about services, 3.1% transportation difficulties, 1.7% lack of time, 1.1% provider refuse to provide care, 15.1% related to other reasons.

Disabled needs

- ⊙ Based on the CBR team assessment, the needs of disabled were identified as follows: 26.9% of the disabled need medical care, 17.4% are in need of supporting equipment (including splints, wheelchairs, crutches, walkers, hearing support devices and glasses), 13.6% need speech therapy, 8.7% need rehabilitation and 8.7% need physiotherapy, 8.3% require referral to specialized institution, 2.6% need prostheses and corrective shoes, 2.2% need psychiatric, 1.7% need social care, 1% need an adapting environment coping with their needs, 0.7% need occupational care, 0.6% need nothing, and 0.1% need a job.

The study concludes to the essential need of developing an integrated and comprehensive community-based rehabilitation system that emphasizes social integration of the disabled in society. In addition of being supported by an intermediate and tertiary care including medical, physiotherapy, speech, occupational and vocational therapy, as well as psychological care, special education and supporting instruments. Moreover, in order to alleviate the impact of prevalent political situation (the Wall, siege, closure, road blockages etc) on the accessibility of those with special needs to the different therapeutic services, it is important to reach them at their communities through outreach mobile services. Attention should be also given to the integration of the disabled in the society by providing them with proper education and job opportunities, as well as better involvement in the family and community activities. The awareness of the community should be raised on the consequences of consanguineous marriages and also on issues related to the right and needs of disabled. Finally, there is an urgent need for more effective coordination mechanisms among different partners and clear guidelines besides the national rehabilitation policy in Palestine.

1. Methodology

1. 1. Introduction

The prevailing political situation in Palestine has negatively affected the people. The Israeli constraints and siege on Palestinian cities, villages, and camps was added by the construction of Apartheid Annexation Wall on Palestinian lands in the West Bank. The social and economic consequences of the political instability (high unemployment and poverty levels) are depriving people from satisfying their basic life needs including health care. Within these circumstances, the disabled are among the most marginalised groups and are significantly influenced by these situations. It became extremely difficult for them to access health services, especially if they are living in the rural areas where they have to reach major cities to receive care. Therefore, a community based approach for rehabilitation reaching the disabled at their localities has been crucial.

The CBR programmes in Palestine have been functioning under a lot of pressure due to the increasing number of disabilities, which is in part due to the conflict. During the past years the CBR programme achieved significant success as a social and developmental programme aiming at integrating and providing rehabilitation to those with special needs. The programme had positive impact on the concept and stance of disabilities in the Palestinian society, particularly in the area of laws and legislations related to the disabled and their rights. Moreover, it contributed to the improvement of living standards of the disabled people as well. Hence, such a positive impact should be developed and geographically extended to reach different target groups including the disabled, their families, and communities in the underserved and underdeveloped rural areas.

This study came up to support the implementation of CBR programme implemented by UHCC at 27 villages in Tulkarm and Qalqilia Districts in the northern parts of the West Bank. The programme is implemented in line with the framework of the National Strategy for CBR and in cooperation and coordination with other organisations working in the field. The idea was to start preparing for a CBR Programme at the above mentioned two Districts in coordination with the CBR programmes being implemented by the other organisations, namely the Medical Relief Committees (MRC) and the Palestinian Red Crescent (PRCS), in these two Districts. Consequently, 27 villages in the two districts were targeted other than those are served by the CBR projects of the prior mentioned organisations. The major characteristic of these villages is that they lie on the both sides of the Apartheid Wall and are significantly influenced by it. Some of these villages are totally isolated, where people living in those villages are only allowed to leave or enter their villages at specific hours of the day, as they have to cross metallic gates only opened at specific time of the day under Israeli surveillance (See Annex 1).

The reason for conducting the survey was providing data about those with special needs residing in the underserved areas that are afflicted by the Separations Wall in order to enable UHCC and other organisations to have better planning of future CBR programmes that respond to the disabled needs. It is noteworthy that similar studies were conducted in each of Jenin, Ramallah and Hebron Districts in

the West Bank by the Regional Committees for Rehabilitation in the nineties (NRCR, 1994; CRCR, 1995; SRCR, 1996).

1.2. Aim and objectives

To collect data about prevalence and types of disability and characteristics of those with special needs in 27 villages afflicted by the Annexation Wall in Tulkarm and Qalqilia Districts in the northern parts of the West Bank in order to support the implementation of the CBR programme in that area.

The specific objectives of the study are:

1. To identify the numbers of those with special needs and the types of their disabilities.
2. To describe the socio-economic characteristics of those with special needs and their families.
3. To determine the type and provider of services currently received by those with special needs.
4. To identify the problems facing persons with special needs and their families.
5. To define the services needs and priorities for those with special needs.
6. To provide recommendations to support the planning and implementation of the CBR programmes.

1.3. Design and tools

The survey employed a descriptive design to achieve the objectives. A structured questionnaire consisting of three parts was used to collect data. In fact the questionnaire was a modified version of the WHO Manual on “Training Disabled within Community” and was developed to suit the local conditions. Part one and two of the questionnaire was used to collect data on the characteristics of those with special needs and their conditions, socio-economic conditions of the families, problems encountered, and whether they received any services. Basically, this part was mainly filled through an interview with the disabled person himself whenever possible with the attendance of a family member or if it was not possible it was done with mother or the father or another family member. Part three was related to the types of the disabilities and services needs. Information was recorded based on the CBR team assessment of the disabled. The tool was pre-tested prior to data collection.

1.4. Study population

The survey population consisted of 27 villages with different sizes in Tulkarm (11 villages) and Qalqilia (16 villages) Districts. As mentioned earlier, these villages were not covered by another CBR programme being implemented by the MRC and PRCS in these Districts (Table.1).

The total number of population of the villages selected in Tulkarm was 27,831 and the villages in Qalqilia was 22,222 persons (PCBS, 2006) (Table.1). Hence, the total number of population under survey was about 50,053 persons, which is about 40% of the two districts population and 2% of the

West Bank population (PCBS, 2006). The total number of surveyed families was 10147, 7814 of them were in Tulkarm and 2333 of them were in Qalqilia District.

Table.1 Demographic indicators of the area under study

District name	District population 2005	Villages population 2005	% of district population 2005	Number of families visited
Tulkarm	167873	27038	16%	7814
Qalqilia	94210	21478	23%	2333
Total	262083	48516	18%	10147

Mid-year population of the West Bank in 2005 was 2,372,216

1.5. Training of the field workers

Within the framework of the CBR project, 20 young CBR workers (18 females and 2 males) were provided intensive training for two months (June-July 2005) by the MRC team. The trainees were selected among those having at least a high school certificate and willingness to work within the CBR programme team.

The training was held at UHCC and Al-Najah National University in Nablus. Besides theoretical training on health issues and health education, home visits for persons with disabilities being treated and followed-up by the Medical Relief's CBR programme were conducted. It is noteworthy that the training programme was based on the WHO Manual for "Training Disabled within Community" but with specific modifications made by the MRC's based on their experiences gained through working with those with special needs.

In the end of the CBR training course, 13 of the trainees were selected for the field work. These were provided with an additional training on the survey method (interviewing) and data collection instrument.

1.6. Data collection

Data were collected through house to house survey in the period between August–September 2005. Two teams of the trained field workers were designated for data collection. One team consisted of 7 workers conducted the survey at 16 villages in Qalqilia District and the second team consisted of 6 workers conducted the survey at 11 villages in Tulkarm District. In addition to that, there were four field work coordinators who were responsible for following-up the data collection team and coordinating with the local communities, as well as employing local communities support to facilitate the work of the CBR teams. In addition to the CBR team, 67 volunteers of the targeted villages were mobilized to help in the survey process. Al-Amal Physiotherapy Center in Tulkarm, and Azoun Specialized Medical Center in Qalqilia (owned by UHCC) were taken as working stations for the

survey teams and coordinators for meeting regularly to check out their work agenda and to discuss and solve out any problems encountered.

Before starting data collection, the supervisors with the help of the volunteers had direct contacts with the villages' councils and local society institutions to explain to them the purposes of the CBR project and to gain their support. Door to door household survey was conducted in the 27 villages. The volunteers from the villages accompanied the team during home visits. During the first visit, part one and two of the questionnaire was filled by the CBR fieldworkers. In the second visit, in addition to the field workers, a specialist team including a physician, a physiotherapy and a rehabilitation specialists participated. Based on the team's assessment the third part of the questionnaire was filled during this visit. All families at the villages were approached during data collection. However, there was very limited number of families who were not willing to participate in the survey. These were estimated to about 3% of the total families in the studied area. In addition to that, there was also about 4% who were not available at their houses during the survey. It worth indicating that the local community institutions and leaders were involved in the planning phase of the project and contributed to data gathering in the targeted villages. The villages' councils and heads of local institutions as well as local people, in particular women, all have provided their support for the team and were very cooperative in conducting the study.

1.7. Data analysis

Data analyses were conducted using SPSS software for windows version 13. Data were coded and entered to the computer. After checking and cleaning the data, descriptive statistics and cross tables were produced using the SPSS programme. In this report only data related to the disabled and their families were presented.

1.8. Limitations

The study was conducted during turmoil and Israeli invasion of the West Bank. As a consequent, frequent road closures and siege imposed on the Palestinian cities, villages and camps in the West Bank in general and with serious intense in the Northern Districts in particular. Moreover, the construction of the Apartheid Wall isolated many villages in Tulkarm and Qalqilia Districts (were targeted in the study) and prohibited the field workers to enter and reach these villages. The only access to those villages is through metallic gates that open at specific hours and under Israeli surveillance. Only citizens living with identity cards of these villages are allowed to cross the gates. Despite several contacts by PTM and the villages' councils with the Israeli officials in charge to issue permits or facilitate the entrance of the survey teams to the targeted areas, the teams faced many difficulties and were inhibited from entering some of the villages. For example, the team was not allowed to re-enter Azoun Atmeh to complete the survey for 34 disabled persons who were identified during the first round of the survey in this village.

2. Background and concepts

2.1. Disability

Disability can be defined as “a loss or abnormality of a body part (i.e. structure) or body function i.e. physiological function that includes mental functions (Miles & Stephenson, 2001).

The number of people with disabilities is increasing significantly due to war, road traffic accidents, landmines, HIV/AIDS, malnutrition, chronic diseases, substance abuse, environmental damage, population growth, medical advances that preserve and prolong life. Certainly, the increase in the number of people with disabilities has created an overwhelming demand for health and rehabilitation services (WHO, 2004).

The number of disabled people worldwide is estimated to 10% of the population (Bury, 2003). More than six hundred million people live with disabilities of various types. Of this total, 80% live in low income countries and do not have access to basic services, including rehabilitation facilities (WHO, 2004). Only about 3% of those who need rehabilitation in the developing countries receive any meaningful services (Helander, 2000).

2.2. Rehabilitation

Rehabilitation as a terminology means helping the person to self-independence. The dictionary definition of rehabilitation is reforming and gaining self-independence (Al-Baa’lbaki, 1987). Physiotherapy is one part of the rehabilitation services.

In the past, in many societies the concept “rehabilitation” was associated with disabilities that were attributed to myths and to religious beliefs. In the beginning of the 20th century the number of disabilities significantly increased due to war, especially after the First World War. New therapeutic techniques were developed to treat different types of disabilities and to integrate the disabled into societies. Consequently, rehabilitation field emerged and witnessed rapid developments. New terminology and services accompanied these developments, where new sections for physical rehabilitation were established separately at hospitals. Physical rehabilitation, physiotherapy and occupational therapy took its role in treatment and later on were expanded and circulated. Hospitals sections were provided with tools, materials and equipment for physiotherapy, occupational therapy and exercises (Dowlin, 1940). The concepts of physical rehabilitation were intensified by the fifties of the 20th century to be related not only to physiotherapy and occupational therapy, but also to vocational rehabilitation, social and psychological care (Piersol, 1952).

2.3. Community based rehabilitation

CBR is defined by the United Nations as “A strategy within community development for the rehabilitation, equalization of opportunities and social integration of all people with disabilities” (ILO, UNESCO, WHO, 2002). Helander (1993), “CBR is a strategy for enhancing the quality of life

of disabled people by improving service delivery, by providing more equitable opportunities and by promoting and protecting their human rights”. CBR is implemented through the combined efforts of disabled people themselves, their families and communities, and the appropriate health, education, vocational and social services (ILO, UNESCO, WHO, 2002).

WHO introduced CBR strategy as part of its goal to accomplish health and rehabilitation needs for all. It has promoted the adoption of CBR as national strategy for addressing the needs of persons with disabilities among its Member States. In 1994 the United Nations issued the Equal Opportunities principles for those with special needs.

The WHO Disability and Rehabilitation (WHO/DAR) envisages a matrix of guidelines to strengthening CBR programme in developing countries that consists of medical rehabilitation, education, economic independence, and social integration leading towards equal citizenship of persons with disabilities (WHO, 2004).

The United Nations Development Programme (UNDP) outlines four key components of CBR programme working with people with disabilities in third world countries (Halender, 1993):

- Mobilising the family and community.
- Empowering people with disabilities themselves.
- Changing attitudes of people towards disability.
- Improving knowledge and increasing access to information.

Community Rehabilitation offers rehabilitative services to disabled at their surrounding environment (local society) through utilizing all resources whether human or financial ones that are available in the local society and all this is done and fulfilled through the participation of the disabled, their families and the local society. It enhances the values of equality and rights and encourages the participation of all concerned parties and provides a solid ground to developing and promoting gender equality and fairness.

2.4. Disability and rehabilitation in Palestine

Peoples’ perceptions and perspective towards those of disabilities in the past were negative. Therefore the disabled were exposed to different prejudices. Those disabled were seen as people in need for care and help and there should be institutions to offer them humanitarian services.

This stereotyped perspective towards those with special needs began to reduce gradually with the development of the concepts and programmes related to disabled rehabilitation. Another important factor, that changed the peoples’ negative perspective, was the Palestinian – Israeli conflict, as many young persons became disabled due to the Israeli aggression, especially during the first and second

Intifada. The conflict has caused significant numbers of disabled whom the society perceive them as national strugglers and accept providing care for them as a national responsibility.

Before the Eighties of the last century, there were a variety of charitable institutions working in the area of rehabilitation in the West Bank and Gaza Strip. These were united under one body the “Central Rehabilitation Committee” in 1980. Later on in the late eighties after the eruption of the first Palestinian Intifada and the increase in the number of disabilities due to the casualties, Local Rehabilitation Committees adapting the community based approach for rehabilitation were established in many Palestinian communities (Abed, 1998). In 1990 the Central National Committee for Rehabilitation was formed to unify fragmentation of the efforts of Palestinian NGOs working in the domain of disabilities and rehabilitation. Meanwhile, in 1991 the Palestinian Disabled General Union was established and joined under the umbrella of the Central National Committee for Rehabilitation (Bsilat, 1998).

As for care provided for the disabled, even after the establishment of the Palestinian National Authority in 1994, non-governmental organisations (NGOs) remained the main providers of the rehabilitation services in Palestine. There are many institutions and committees involved in the rehabilitation process although each of these institutions followed certain agenda and criteria. The structure of CBR programme in Palestine is provided (Annex 2).

According to Jarar (2006) the rehabilitation services system in Palestine consists of three main levels:

1. The national level: this level offers specialized services at three main institutions located in the middle of the West Bank and Gaza Strip. It represents 10% of the rehabilitation services.
2. The middle level: this level works between the national and societal levels. Many institutions and committees working at this level provide different and variable services including vocational, physical rehabilitation, speech therapy, education, diagnostic services, physiotherapy, occupational therapy, support instruments, and others. This level represents 20 – 30% of the rehabilitation services.
3. The community or first level: this level consists of local committees, civil society institutions, health and social organizations as well as individuals. These parties work on reaching the disabled persons and offer services to them wherever they reside. Services include enhancing societal awareness, psychological support, early detection of disabilities, and modifying the different public utilities to ease the arrival of the disabled in a way that helps in integrating the disabled in the society. This level represents 60 – 70% of the rehabilitation services.

In general, rehabilitation services in Palestine are geographically mal-distributed in favour of major urban areas. Furthermore, rehabilitation services lack occupational therapy, vocational rehabilitation, support instruments, and special education services. Particularly, there is a great need for special

education and speech therapy (Jarar, 2006). Additionally, there is still a need for national structure and policy framework to seek complementarity and integration of different providers of rehabilitation services and to achieve effectiveness of services (Harami, 1998).

3. Main findings

3.1. Prevalence of disability

In the house to house survey 10147 families were visited: 7814 families at 11 villages in Tulkarm and 2333 families at 16 villages in Qalqilia District. Based on the CBR team assessment 806 persons with disability were identified; 401 persons with disability (49.9%) in 11 villages in Tulkarm District and 405 persons (50.1%) were at 16 villages in Qalqilia District (Table.2). This means that there is an average of 8 disabled persons per 10 families in the studied areas.

The average disability rate is (1.9%) in the villages surveyed in Qalqilia where it is (1.5%) in those of Tulkarm District (Fig.1). The highest rate of disability in Tulkarm District is found in Nazlet Issa (2.3%) and the lowest is found in Kafr Sour (0.8%). Whereas in Qalqilia the highest rate is in Farata (3.6%) and the lowest is in Jinsafut (1.0%).

In comparison, the Palestinian Population Census in 1997 found that 1.8% of the Palestinians were disabled, of which 1.9% in the West Bank and 1.6% in Gaza Strip. The highest disability rate in the West Bank was found in Qalqilia and Tulkarm 2.3% (PCBS, 2000).

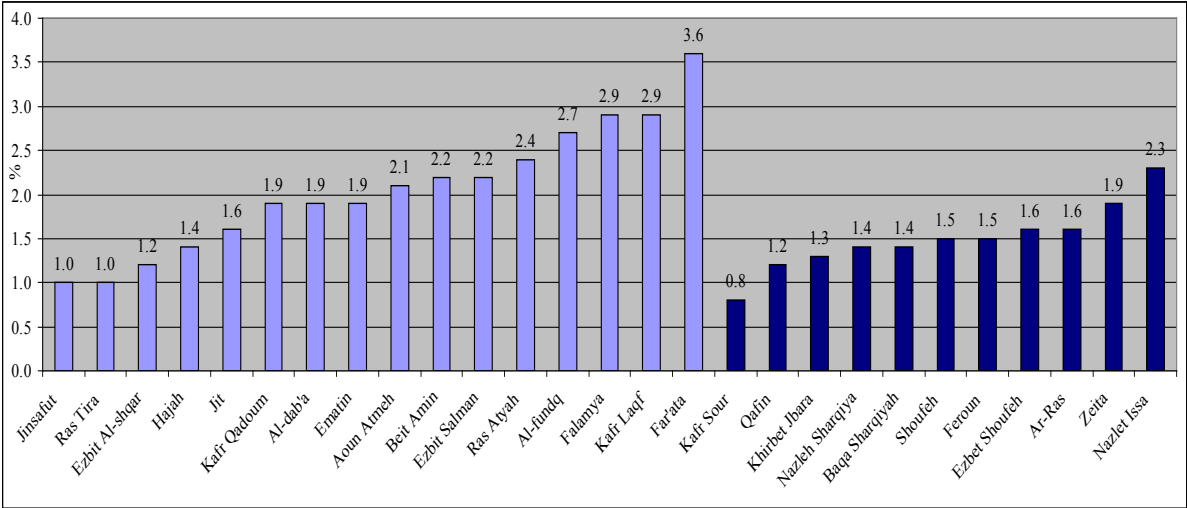


Fig.1 Disability rate by village

Table.2 Distribution of the number of disabilities and rates by village

Village	Number of families visited	Mid-year population (2005)	Number of disabilities	% within the total number of disabilities	Disability rate (%)
Jinsafut	211	2203	22	2.7	1.0
Ras Tira	51	384	4	0.5	1.0
Ezbit Al-Ashqar	39	404	5	0.6	1.2
Hajah	209	2444	34	4.2	1.4
Jit	252	2243	35	4.3	1.6
Kafr Qadoum	260	3376	57	7.1	1.9
Al-dab>a	34	261	5	0.6	1.9
Ematin	275	2368	46	5.7	1.9
Azoun Atmeh	204	1614	34	4.2	2.1
Beit Amin	100	1108	24	3.0	2.2
Ezbit Salman	97	622	14	1.7	2.2
Ras Atyah	224	1545	37	4.6	2.4
Al-fundq	91	637	17	2.1	2.7
Falamya	79	683	20	2.5	2.9
Kafr Laqf	139	951	28	3.5	2.9
Far>ata	68	635	23	2.9	3.6
Qalqilia total	2333	21478	405	50.1	Mean=1.9
Kafr Sour	113	1218	10	1.2	0.8
Qafin	1010	8489	104	12.9	1.2
Khirbet Jbara	42	317	4	0.5	1.3
Al-Nazleh Al-sharqiya	107	1600	22	2.7	1.4
Baqa al-sharqiyah	517	4165	60	7.4	1.4
Shoufeh	158	1218	18	2.2	1.5
Feroun	431	3099	48	6.0	1.5
Ezbet Shoufeh	132	958	15	1.9	1.6
Ar-Ras	76	492	8	1.0	1.6
Zeita	390	3052	57	7.1	1.9
Nazlet Issa	172	2430	55	6.8	2.3
Tulkarm total	7814	27038	401	49.9	Mean=1.5
Overall total	10147	48516	806	100.0	Mean=1.7

3.2. Characteristics of the disabled persons

Age and gender

The age distribution of the disabled person is as follows: 12.5% are less than 5 years old, 35.2% between 6-18 years old, and 52.2% are above the age of 18 (Fig.2). This shows that the highest percentage of disabilities is within persons above the age of 18 (52.2%) and children (those ages under 18 years) form 47.8% of the total disabled persons in the studied area.

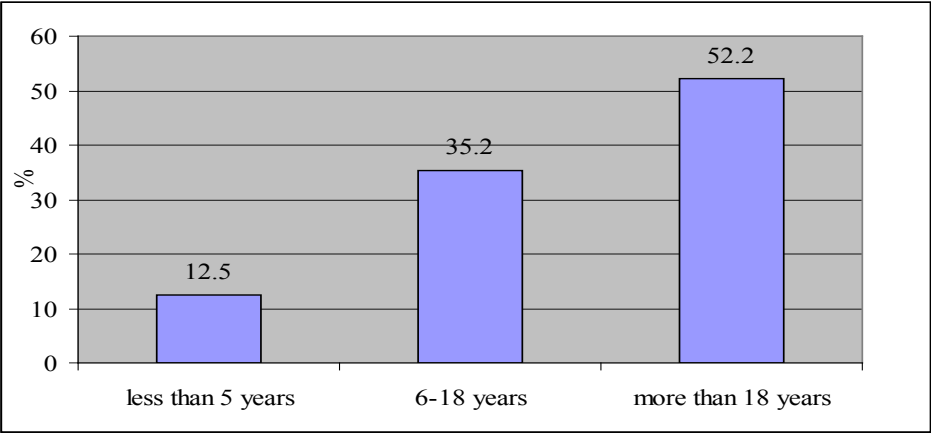


Fig.2 Age distribution of disabled persons

In terms of gender, 62.8% of the disabled persons are males and 37.2% are female (Fig.3). These results correspond to the 1997 Population Census results, where disability in Palestine was higher among males than females, 60.6% and 39.4% respectively (PCBS, 2000). In our study, relatively higher reported disability prevalence among males can be explained by higher traffic and work accidents, as well as Intifada casualties among males (see section 3.13 for the causes by gender). Another important reason might be the reluctance of families in reporting female disabilities due to socio-cultural reasons including the fear of stigma.

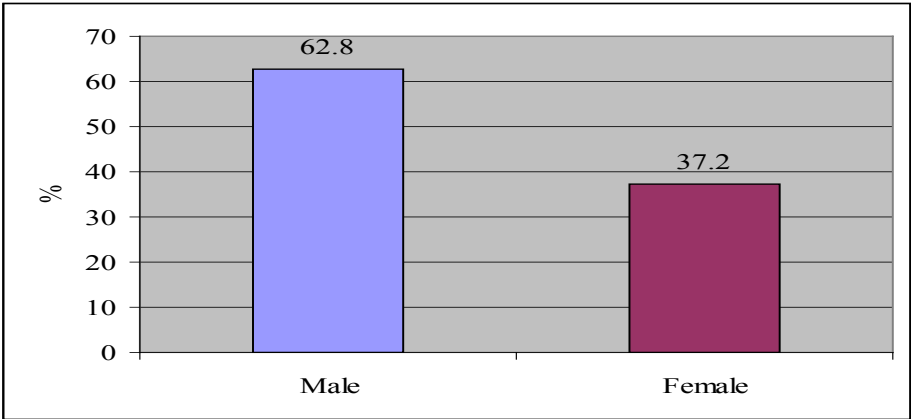


Fig.3 Gender distribution of disabled persons

If we look at the age distribution of the disabled persons according to gender (Table.3) we can see that there is not any significant statistical difference that was found in the age of disabled according to gender (p=0.099) .

Table.3 Distribution the disabled by age groups and gender

	male	female	Total
less than 5 years	59	42	101
	11.7%	14.0%	12.5%
6-18 years	168	116	284
	33.2%	38.7%	35.2%
more than 18 years	279	142	421
	55.1%	47.3%	52.2%
Total	506	300	806
% column	100.0%	100.0%	100.0%

(Chi-square=4.616, p=0.099)

3.3. Types of disability

The largest type of disability is physical (34 % of the total cases), followed by mental 15.9%, speech 11.4 %, ophthalmic 10.9%, hearing difficulties 8.4%, learning difficulties 7.4%, and 7.2% compound disabilities¹ (Fig.4).

In comparison with 1997 Population Census results (PCBS, 2000), movement disability was the most widespread type of disability 30.2%, followed by seeing (ophthalmic) 14.6%, mental 14.5%, and grasping 3.5%. It is important to note that grasping is a sub-category of physical disability in our study, which means that physical disability according to the Census results would be 33.7% and that is similar to our results. On the other hand the prevalence of hearing disability in the studied Districts is 8.4%, which is much higher than the national percentage of 5.1% (PCBS, 2000).

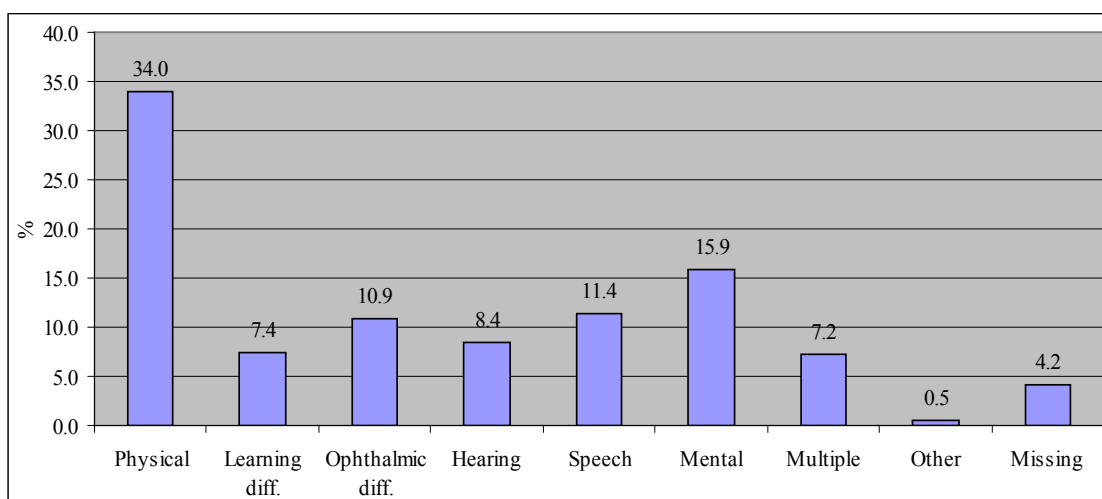


Fig.4 Types of disability

¹ It is important to note that data about the type, duration, reason and needs of the 34 disability cases identified in Azoun Atmeh are not available (appears missing in the following tables) since the team was not allowed to enter the village to complete the second round of the survey.

Type of disability by locality

It is clear that there are differences in the types of disability between the two districts ($p=0$). Especially, the prevalence of physical disability, ophthalmic, and speech disabilities are higher in Tulkarm villages than those of Qalqilia. Conversely, mental disability is significantly higher in the studied Qalqilia villages (Table.4). Still, to have a correct and detailed view, it is important to look at the type of disability by villages.

Table.4 Type of disability by district

	Tulkarm	Qalqilia	Total
physical	153 38.1%	121 30.0%	274 34.0%
learning difficulties	27 6.7%	33 8.2%	60 7.4%
ophthalmic difficulties	58 14.4%	30 7.4%	88 10.9%
hearing	35 8.7%	33 8.2%	68 8.4%
speech	49 12.2%	43 10.6%	92 11.4%
mental	42 10.4%	86 21.3%	128 15.9%
Multiple	36 9.0%	22 5.4%	58 7.2%
other	2 0.5%	2 0.5%	4 0.5%
missing	0 0.0%	34 8.4%	34 4.2%
	100.0%	100.0%	100.0%

(Chi-square= 66.196, $p=0.0$)

If we look at the type of disability by villages (Table.5), we can see that the major type of disability, the physical, has the highest percentage in Qafin in Tulkarm district (13.5% of the total number of disabilities in the village), and then follows learning difficulties in Ras Atyah (13.3%), ophthalmic difficulties in Baqa Al-Sharqiya (14.8%), hearing in Kafir Qadoum (17.6%), speech in Qafin (12%), and mental in Qafin (12.5%). It is important to highlight that Qafin also has the highest percentage of compound disabilities (25% of the total number of disabilities in the same village). The difference in the type of disability among villages is statistically significant ($p=0$).

Table.5 Type of disability by village

Village	physical	learning difficulties	ophthalmic	hearing	speech	mental	multiple	other	missing	Total
Fer>oun	18	2	4	7	4	5	7	1	0	48
	37.5%	4.2%	8.3%	14.6%	8.3%	10.4%	14.6%	2.1%	0.0%	100.0%
Shoufah	6	2	1	2	0	2	5	0	0	18
	33.3%	11.1%	5.6%	11.1%	0.0%	11.1%	27.8%	0.0%	0.0%	100.0%
Izbt Shoufah	6	2	2	0	4	0	1	0	0	15
	40.0%	13.3%	13.3%	0.0%	26.7%	0.0%	6.7%	0.0%	0.0%	100.0%
Al-ras	6	0	0	0	1	1	0	0	0	8
	75.0%	0.0%	0.0%	0.0%	12.5%	12.5%	0.0%	0.0%	0.0%	100.0%
Kafir Sour	4	2	1	0	1	2	0	0	0	10
	40.0%	20.0%	10.0%	0.0%	10.0%	20.0%	0.0%	0.0%	0.0%	100.0%
Khrbit Jubara	1	1	1	0	1	0	0	0	0	4
	25.0%	25.0%	25.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Falama	9	1	1	2	0	3	3	1	0	20
	45.0%	5.0%	5.0%	10.0%	0.0%	15.0%	15.0%	5.0%	0.0%	100.0%
Qafin	37	2	12	11	11	16	15	0	0	104
	35.6%	1.9%	11.5%	10.6%	10.6%	15.4%	14.4%	0.0%	0.0%	100.0%
Al-nazleh Sharqiya	4	1	4	3	4	2	4	0	0	22
	18.2%	4.5%	18.2%	13.6%	18.2%	9.1%	18.2%	0.0%	0.0%	100.0%
Nazlit Issa	22	2	10	9	6	4	2	0	0	55
	40.0%	3.6%	18.2%	16.4%	10.9%	7.3%	3.6%	0.0%	0.0%	100.0%
Zeita	23	7	10	2	8	4	2	1	0	57
	40.4%	12.3%	17.5%	3.5%	14.0%	7.0%	3.5%	1.8%	0.0%	100.0%
Baqa Al-sharqyah	25	6	13	1	9	6	0	0	0	60
	41.7%	10.0%	21.7%	1.7%	15.0%	10.0%	0.0%	0.0%	0.0%	100.0%
Al-Fundq	4	4	2	0	1	5	1	0	0	17
	23.5%	23.5%	11.8%	0.0%	5.9%	29.4%	5.9%	0.0%	0.0%	100.0%
Kafir Laqif	6	2	4	1	1	11	3	0	0	28
	21.4%	7.1%	14.3%	3.6%	3.6%	39.3%	10.7%	.0%	0.0%	100.0%
Far>ata	9	0	5	0	3	6	0	0	0	23
	39.1%	0.0%	21.7%	0.0%	13.0%	26.1%	0.0%	0.0%	0.0%	100.0%
Ematin	11	7	8	5	6	9	0	0	0	46
	23.9%	15.2%	17.4%	10.9%	13.0%	19.6%	0.0%	0.0%	0.0%	100.0%
Kafir Qadoum	21	0	2	12	3	11	8	0	0	57
	36.8%	0.0%	3.5%	21.1%	5.3%	19.3%	14.0%	0.0%	0.0%	100.0%
Jinsafut	9	1	0	3	4	4	1	0	0	22
	40.9%	4.5%	0.0%	13.6%	18.2%	18.2%	4.5%	0.0%	0.0%	100.0%
Izbt Salman	6	0	0	2	2	2	2	0	0	14
	42.9%	0.0%	0.0%	14.3%	14.3%	14.3%	14.3%	0.0%	0.0%	100.0%
Ras Atiyah	8	8	3	2	3	13	0	0	0	37
	21.6%	21.6%	8.1%	5.4%	8.1%	35.1%	.0%	.0%	0.0%	100.0%
Ras Tira	1	0	0	1	1	1	0	0	0	4
	25.0%	0.0%	0.0%	25.0%	25.0%	25.0%	00%	0.0%	0.0%	100.0%
Al-dab>a	2	0	0	0	0	3	0	0	0	5
	40.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	100.0%
Izbt Al-ashqar	1	1	1	0	1	0	1	0	0	5
	20.0%	20.0%	20.0%	0.0%	20.0%	0.0%	20.0%	0.0%	0.0%	100.0%
Hajjah	17	4	0	4	4	4	1	0	0	34
	50.0%	11.8%	0.0%	11.8%	11.8%	11.8%	2.9%	0.0%	0.0%	100.0%
Jit	11	2	4	1	5	10	2	0	0	35
	31.4%	5.7%	11.4%	2.9%	14.3%	28.6%	5.7%	0.0%	0.0%	100.0%
Beit Amin	7	3	0	0	9	4	0	1	0	24
	29.2%	12.5%	0.0%	0.0%	37.5%	16.7%	0.0%	4.2%	0.0%	100.0%
Azoun Atmeh	0	0	0	0	0	0	0	0	34	34
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	274	60	88	68	92	128	58	4	34	806
%	34.0%	7.4%	10.9%	8.4%	11.4%	15.9%	7.2%	.5%	4.2%	100.0%

(Chi-square=1092.770, p=0)

Type of disability by age groups

Table (6) shows the main types of disabilities according to age groups of disabled. It is clear that physical disability is the major type for all age groups; 34.7% of those are below the age of five, 28.2% are between 6-18years, and 37.5% of those who are above the age of 18 are physically disabled. It is followed by speech disability for less than 5 years (19.8%) and between 6-18 years (18.3%) age groups. While mental disability is the second important type of disability in those above the age of 17 (19.7%) and it is in the third place for those less than 5 years (9.9%) and those between 6-18 years old (12.3%). Ophthalmic disabilities are in the fourth place for all age groups. The difference in the type of disabilities in relation to the age groups is statistically significant ($p=0$).

Table.6 Type of disability by disabled age groups

Type of disability	less than 5 years	6-18 years	more than 18 years	Total
Physical	35 34.7%	80 28.2%	159 37.8%	274 34.0%
Learning difficulties	4 4.0%	31 10.9%	25 5.9%	60 7.4%
Ophthalmic difficulties	10 9.9%	30 10.6%	48 11.4%	88 10.9%
Hearing	7 6.9%	27 9.5%	34 8.1%	68 8.4%
Speech	20 19.8%	52 18.3%	20 4.8%	92 11.4%
Mental	10 9.9%	35 12.3%	83 19.7%	128 15.9%
Multiple	6 5.9%	22 7.7%	30 7.1%	58 7.2%
Other	0 0.0%	0 0.0%	4 1.0%	4 .5%
Missing	9 8.9%	7 2.5%	18 4.3%	34 4.2%
Total	101	284	421	806
% row	100.0%	100.0%	100.0%	100.0%

(Chi-square=67.293, $p=0$)

Type of disability by gender

Except for physical disability (34% for both genders), there are differences in the types of disability between males and females. There is a difference in the type of disability in relation to the gender of the disabled, which is statistically significant ($p=0.032$). While learning difficulties, ophthalmic difficulties, speech and multiple disabilities prevalence are higher among females, hearing and mental disabilities are higher among males (Table.7).

Table.7 Type of disability by gender

Type of disability	Male	Female	Total
Physical	172	102	274
	34.0%	34.0%	34.0%
Learning difficulties	33	27	60
	6.5%	9.0%	7.4%
Ophthalmic difficulties	52	36	88
	10.3%	12.0%	10.9%
Hearing	47	21	68
	9.3%	7.0%	8.4%
Speech	49	43	92
	9.7%	14.3%	11.4%
Mental	94	34	128
	18.6%	11.3%	15.9%
Multiple	34	24	58
	6.7%	8.0%	7.2%
Other	1	3	4
	.2%	1.0%	.5%
Missing	24	10	34
	4.7%	3.3%	4.2%
Total	506	300	806
% column	100.0%	100.0%	100.0%

(Chi-square=16.785, p=0.032)

3.4. Duration of the disability

The duration (years) of the disability is distributed as follows: 31.6% of the disabilities are less than 5 years, 42.2% more than 10 years, and 22% are between 6-10 years duration (Fig.5).

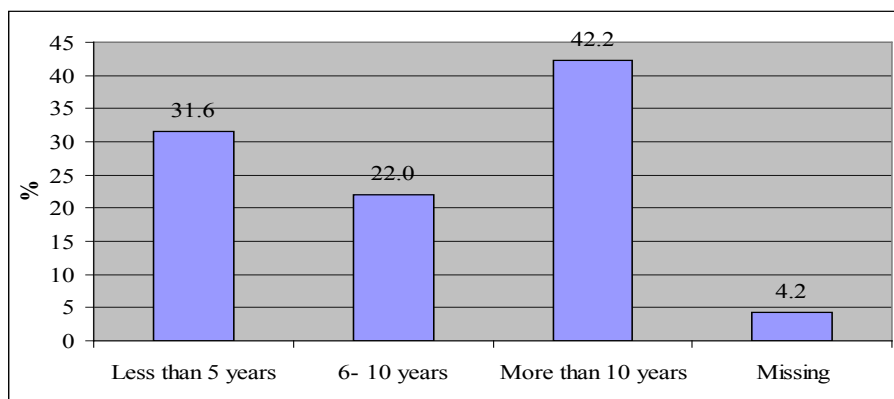


Fig.5 Duration of the disability (years)

3.5. Social integration

The social integration of the disabled persons can be assessed by the level of participation in family and community activities, having a job, playing and going to school especially for those less than 18 years old (childhood). The results show that while about 70% of the disabled persons are participating in family activities (those answered yes or sometimes), only 60.4% (those answered yes or sometimes)

are taking part in community activities (Fig.6). This might be explained by low acceptance of the disabled and the lack of support mechanisms enabling them to integrate in the society (Fig).

The results also show that 22.6% of the persons with disabilities can perform their daily activities (e.g. eating, drinking, wearing, cleansing) by themselves, 20.5% can perform them sometimes, which means that they need some help, and 20.8% are totally dependent on others for daily activities (Fig.6). It is evident that there are significant relationships between the age groups of the disabled with the level of participation in family activities (Table.8), with community activities (Table.9), and with their ability to perform daily activities (Table.10) (p=0).

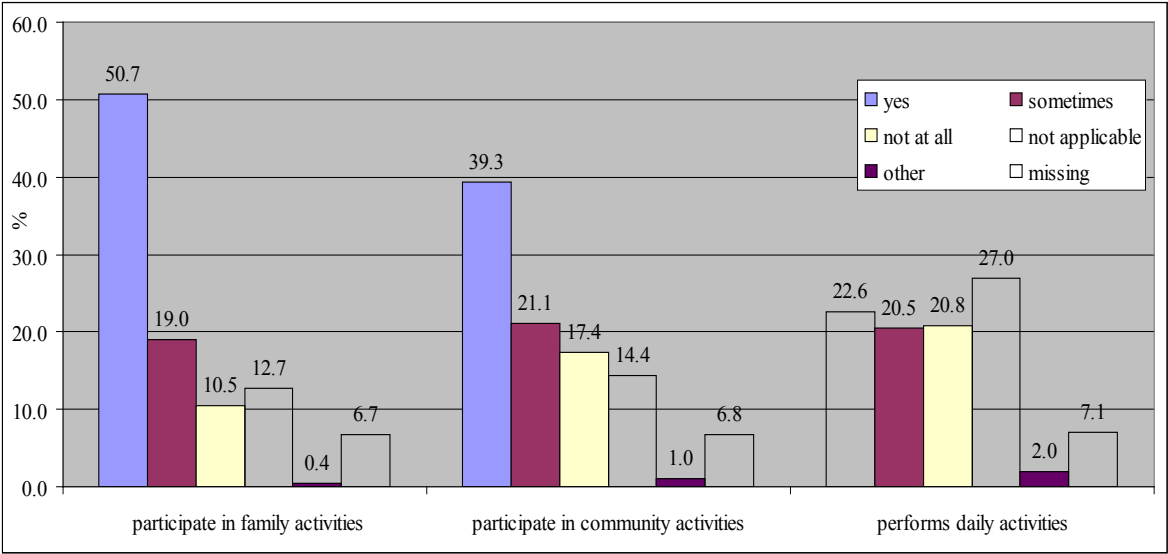


Fig.6 Participation of the disabled in family, community activities, and performing daily activities

In order to have more adequate idea about participation in educational, playing and having job or income, it is important to look at the distribution of these variables by age groups. Looking at those in the childhood (less than 18 years) we can see that 58.8% of those at schooling age (6-18 years) and 1.2% of those above the age of 18 (in total 22.2% of the disabled persons) are enrolled at schools (Table). In normal conditions those above the age of 18 would have finished high school at the age of 18 to 19 years. On the other hand, 55.4% of those who are less than 5 years old and 46.7% of those aged 6-19 play normally or as youngsters (Table). Regarding their participation in economic activities, the results show that only 7.9% have a job or income and 6.6% have a job or income or income sometimes (Table). In particular, 19.2% of those above the age of 19 have a job or income. This explains why economic difficulties are being the major factor affecting the disabled and their families, in addition to being the major obstacle for receiving care.

Table.8 Age groups of the disabled by whether he/she enrolled at school (%)

	goes to school	no	not applicable	other	missing	Total
0-5 age	0.0	100.0	0.0	0.0	0.0	100.0
6-19 age	58.8	19.6	11.1	3.0	7.4	100.0
20 + age	1.2	10.3	75.3	1.5	11.7	100.0
Total	22.2	24.9	42.3	1.9	8.7	100.0

(Chi-square =782.870, p=0.0)

Table.9 Age groups of the disabled by whether he/she plays normally (%)

	yes	plays as youngsters	doesn't play at all	not applicable	other	missing	Total
0-5 age	49.5	5.9	11.9	20.8	3.0	8.9	100.0
6-19 age	42.6	4.1	9.1	33.4	2.0	8.8	100.0
20 + age	0.7	0.5	0.2	87.8	1.0	9.8	100.0
Total	22.2	2.5	5.0	59.4	1.6	9.3	100.0

(Chi-square= 356.831, p=0.0)

Table.10 Age groups of the disabled by whether he/she has a job or income

	yes	sometimes	not at all	not applicable	other	missing	Total
0-5 age	1.0	3.0	9.9	71.3	6.9	7.9	100.0
6-19 age	3.2	8.1	25.4	53.5	3.9	6.0	100.0
20 + age	12.8	6.4	60.1	13.3	1.0	6.4	100.0
Total	7.9	6.6	41.6	34.7	2.7	6.5	100.0

(Chi-square=243.643 , p=0.0)

3.6. Family characteristics

Understanding the socio-economic environment of the disabled is very important in assessing the causes and needs of the disabled and essential for designing and implementing the CBR programmes. In this section the results about the socio-economic conditions of the family of the disable are presented.

House and family size

The results show that the houses where the disabled live are relatively small (in average 3 rooms) where, 69.5% of the houses have 1-3 rooms, 29.3% have 4-6 rooms, 1.2% have more than 6 rooms (Fig.7). In comparison 48.7% of the houses in Palestine have 1-3 rooms, 32% have four rooms and 19.3% have five and more rooms (PCBS, 2006). This gains more significance when we look at the average number of persons living at the house, as we can see that the disabled live within relatively crowded families, 54.1% of the families live or have 6-10 persons, 10% live with more than 10 persons, and 35.9% live with 1-5 persons (Fig.8). The average size of the disabled families is 6.67 persons in comparison with 5.8 persons per family in the West Bank and 6.2 persons in Palestine (PCBS, 2006). Consequently, at the disabled family houses there is an average of 2.2 persons living per room.

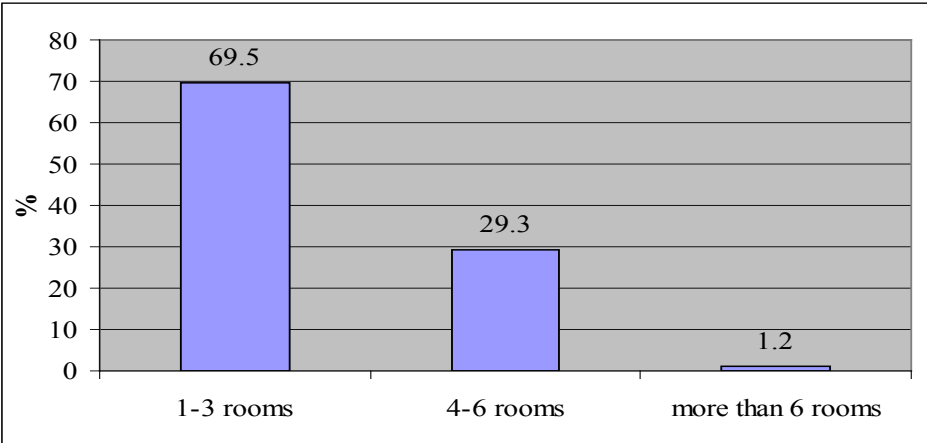


Fig.7 Number of rooms per house

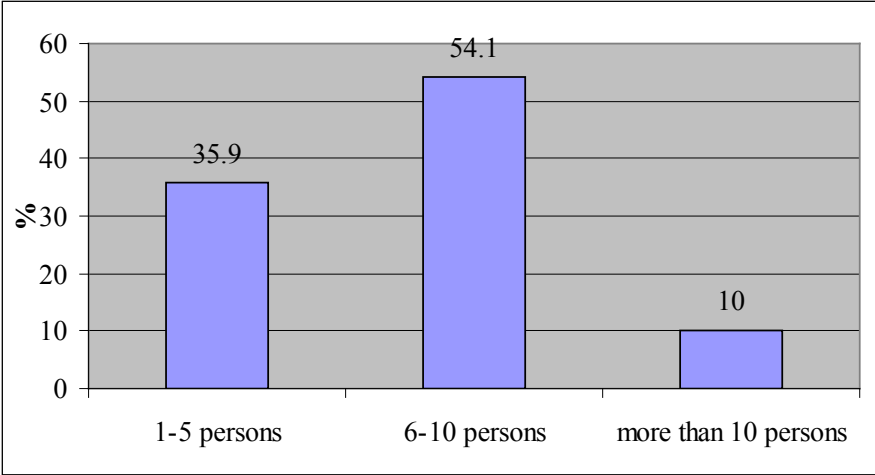


Fig.8 Number of persons per house

3.7. Family economic conditions

As for the economic conditions of the families, 57.4% of the families rated their income level as fair, 27.5% rated it as bad, and 7.2% rated it as good income level (Fig.9). It is important to notice that 37.8% of the families are without any person working, 54.5% have only one person, and 7.7% have two or more working persons at the family (Fig.10). As could be expected, there is a significant difference in the economic level of the family in relation to the number of working persons at the families of the disabled ($p=0$) (Table.11).

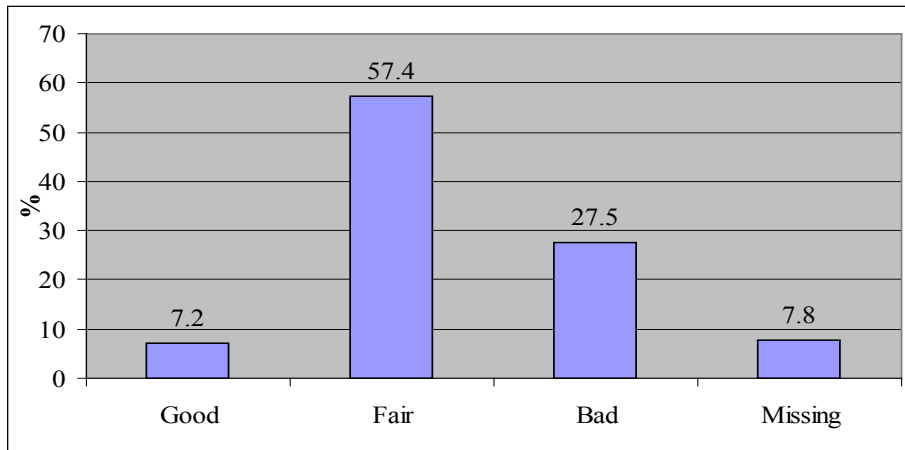


Fig.9 Level of family income

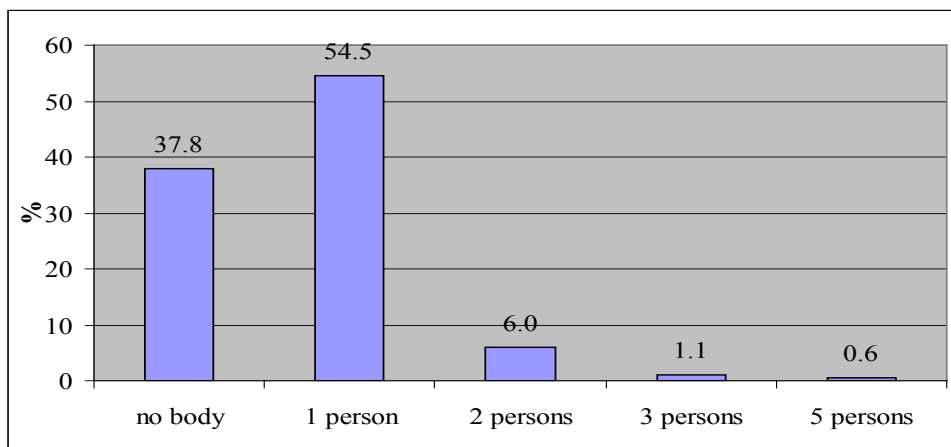


Fig.10 Number of working persons per family

Table.11 Number of working persons per family by the level of the family income

	good	fair	bad	missing	total
Nobody	8 2.6%	124 40.7%	139 45.6%	34 11.1%	305 100.0%
1 person	41 9.3%	298 67.9%	77 17.5%	23 5.2%	439 100.0%
2 persons	7 14.6%	29 60.4%	6 12.5%	6 12.5%	48 100.0%
3 persons	2 22.2%	7 77.8%	0 0.0%	0 0.0%	9 100.0%
5 persons	0 0.0%	5 100.0%	0 0.0%	0 0.0%	5 100.0%
Total	58 7.2%	463 57.4%	222 27.5%	63 7.8%	806 100.0%

(Chi-square=114.329, p=0)

Despite modest economic conditions the results show that 94.5% of the families of the disabled have their own houses; only 3.5% have rented houses (Fig.11).

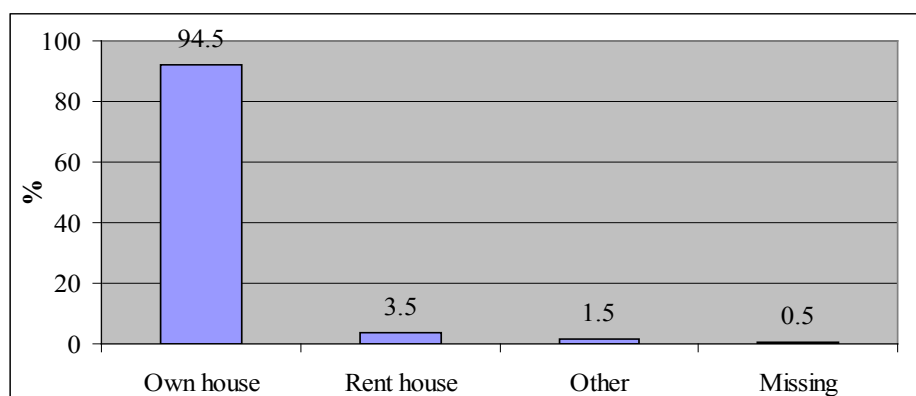


Fig.11 Type of family house

3.8. Parents' characteristics

The average age of fathers is 45.2 years, while it is for the mothers 41.6 years. The age distribution of parents is as follows: 54.1% of the fathers are aged between 19-45 years, 40.2% are more than 45 years, and 5.7 of the disabled fathers are dead (Fig.12). As for the mothers, 65.6% are between 19-45 years old, 31% are more than 45 years, 0.2% are less than 18 years, and 3.1% are dead (Fig.12).

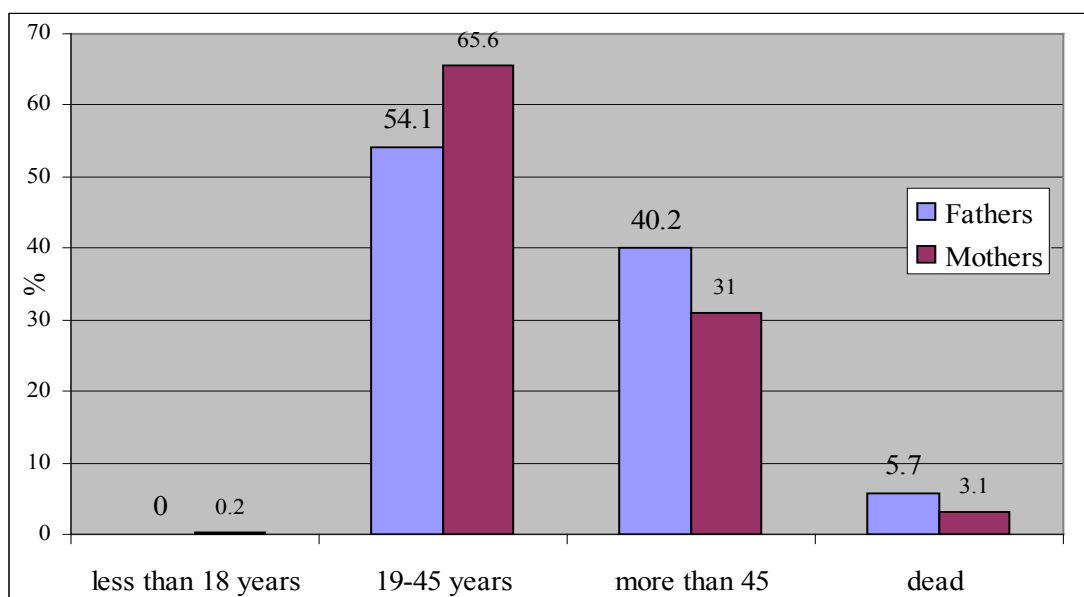


Fig.12 Parents' age distribution

Concerning parents education level (years), while fathers have 8 years education in average, mothers have 4.4 years. The distribution of education level of the parents shows that 49.6% of the fathers have 7-12 years of education, 25.7% have 1-6 years, 12.7% are illiterate and 12% have higher education (Fig.13). In comparison, 46% of the mothers have 7-12 years of education, 23.3% have 1-6 years, and 25.4% are illiterate (Fig.13). These figures indicate lower education level of mothers than fathers, which is a typical characteristic of the Palestinian society, where in 2003 the literacy rate of males ageing 15 years and above that age was 96.3% and for females it was 87.4% (PCBS, 2006).

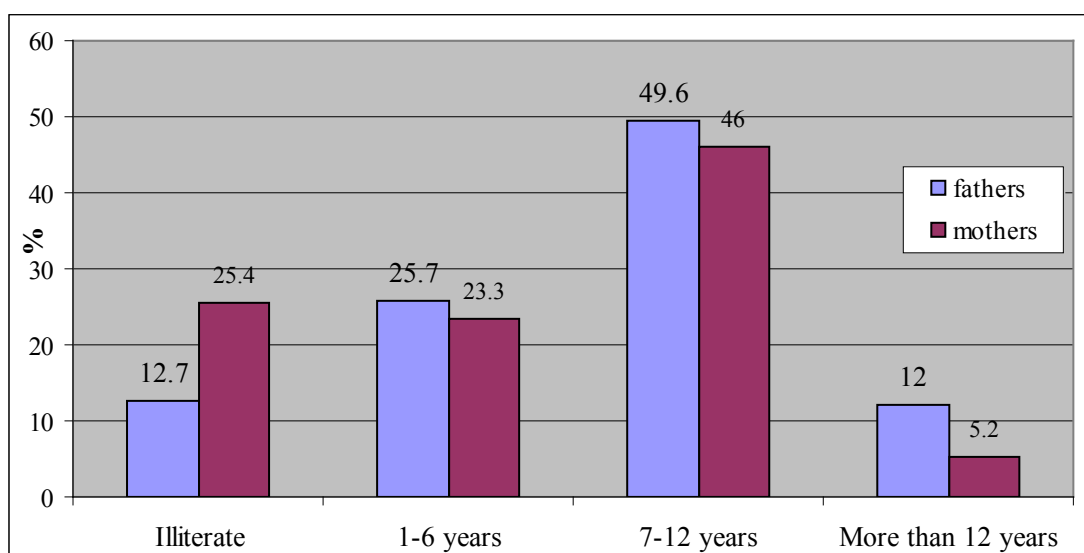


Fig.13 Parents' education level

As for the parents job status, 38.3% of the fathers are unemployed, 36.7% are workers, 9.8% are farmers, 8.6% are employees and 5.1% are self employed (Fig.14). However, 95% of the mothers are housewives, only 3.8% of them have jobs (Fig.14).

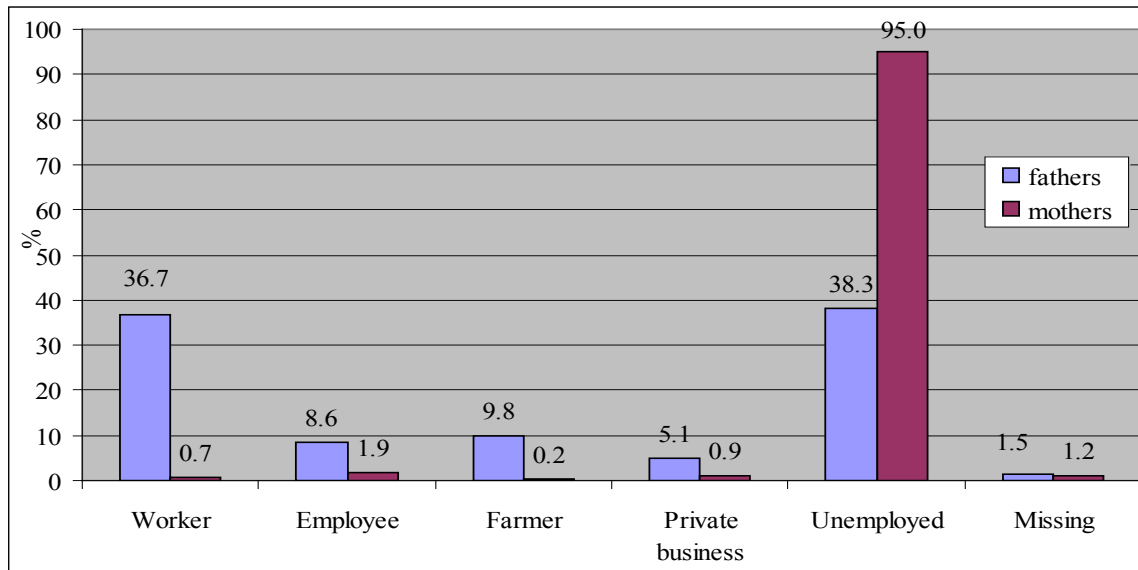


Fig.14 Parents' job distribution

3.9. Kinship degree among parents

Consanguineous marriage is a prevalent characteristic of the Palestinian society mainly due to socio-cultural values. Since the relationship between consanguineous marriages and genetic/ congenital disabilities is well known, it was important to look at the kinship degree among the parents of the disabled person. The results show that 39% of the parents are first degree relatives, 11.8% are second degree relatives, and 48.1% do not have any kind of kinship. This indicates that 50.7% of the parents are either first or second degree relatives (Fig.15). However, in this study no statistically significant relationship between the type of disability and the degree of kinship among parents was found ($p=0.153$) (Table.12). This rate is very significant when compared with national figures, where in 2004 45.2% of married women in Palestine, and 41.9% in the West Bank, were part of a consanguineous marriage being to a first cousin or a further relative (PCBS, 2006).

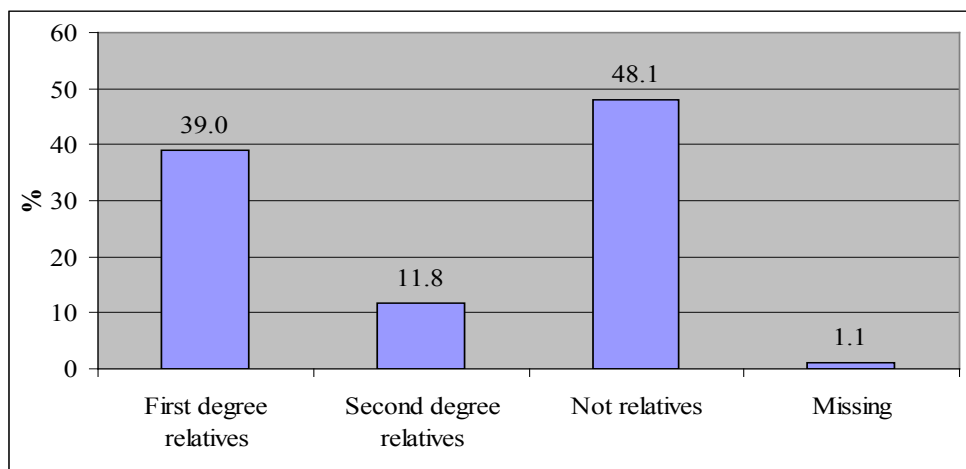


Fig.15 Degree of kinship between parents

Table.12 Type of disability by degree of kinship between parents

Type of disability	First degree relative	Second degree relative	Not relative	Missing	Total
Physical	85 31.0%	38 13.9%	147 53.6%	4 1.5%	274 100.0%
Learning difficulties	23 38.3%	9 15.0%	27 45.0%	1 1.7%	60 100.0%
Ophthalmic difficulties	36 40.9%	6 6.8%	46 52.3%	0 .0%	88 100.0%
Hearing	32 47.1%	6 8.8%	30 44.1%	0 0.0%	68 100.0%
Speech	43 46.7%	14 15.2%	35 38.0%	0 0.0%	92 100.0%
Mental	53 41.4%	13 10.2%	61 47.7%	1 0.8%	128 100.0%
Multiple	28 48.3%	5 8.6%	23 39.7%	2 3.4%	58 100.0%
Other	0 0.0%	0 0.0%	4 100.0%	0 0.0%	4 100.0%
Missing	14 41.2%	4 11.8%	15 44.1%	1 2.9%	34 100.0%
Total	314	95	388	9	806
% row	39.0%	11.8%	48.1%	1.1%	100.0%

(Chi-square=31.037, p= .153)

3.10. Availability of other disabled persons at family

The results show that 32.5% of the families of persons with disability have more than one disabled (Fig.16). When we look at the availability of other disabled person by the degree of kinship among parents (Table.13) we can see that 51.9% of the first or second degree relative parents have more than one disabled child. Particularly 42.0% of first degree relative parents have another disabled child (Fig.16), which might reveal to the relationships between the kinship among parents and genetic/ congenital disabilities. However, not a significant difference in the availability of other disabled at the family in relationship with the degree of kinship among parents was found (p= 0.468) (Table).

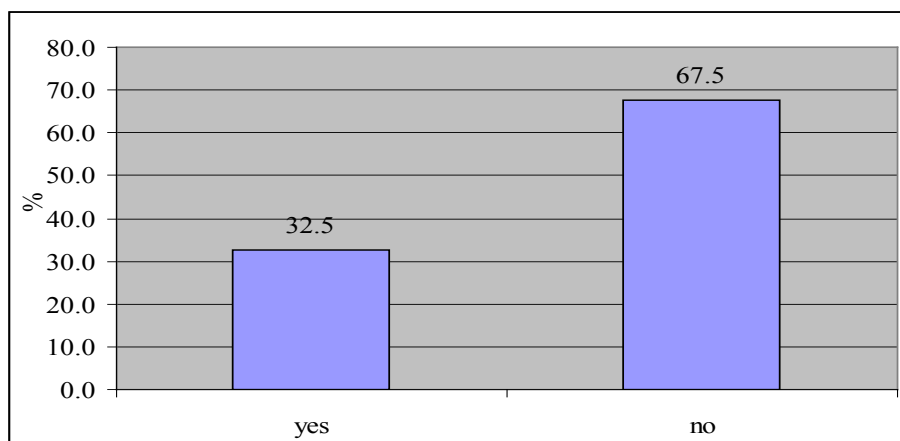


Fig.16 Availability of other disabled persons at family

Table.13 Degree of kinship among parents by availability of other disabled at family

	yes	no	Total
first degree relatives	110	204	314
	42.0%	37.5%	39.0%
second degree relatives	26	69	95
	9.9%	12.7%	11.8%
no relatives	124	264	388
	47.3%	48.5%	48.1%
missing	2	7	9
	0.8%	1.3%	1.1%
Total	262	544	806
%	100.0%	100.0%	100.0%

(Chi-square=2.543 , p=0.468)

3.11. Problems facing the disabled

Persons with disabilities or members of families were asked about the problems facing the disabled. The results presented in Fig (17) show that economic difficulties (36%) is the main one, followed by 26.7% as psychological, 5.7% as medical, 4.1% as social and 15% related to other types of problems.

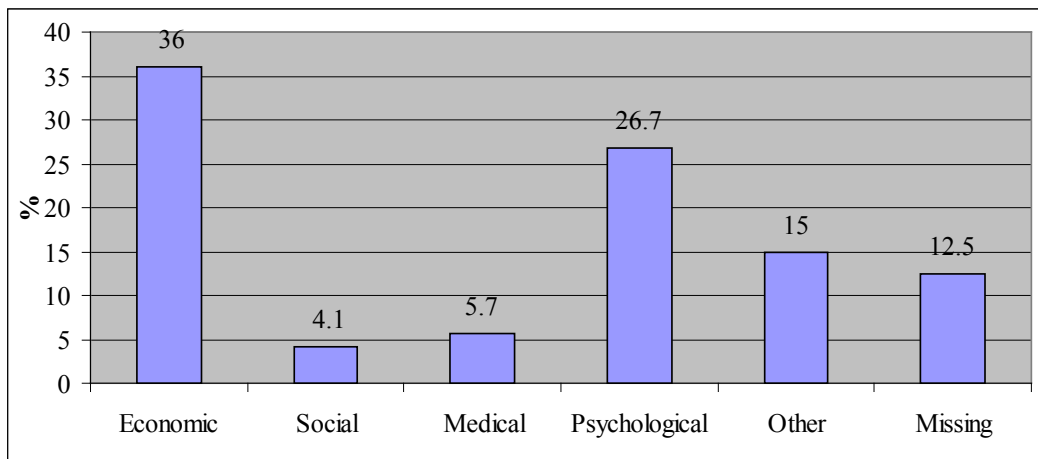


Fig.17 Problems facing the disabled

Problems facing the disabled by type of disability

If we look at the problems facing the disabled by the type of disability we can see that the major problem facing the disabled person is an economic problem except for those who are with learning disabilities and expressed other type of problems (31.7%) (Table.14). There is a high significant statistical difference in the type of problem faced by the disabled and the type of disability (p=0).

Table.14 Problems facing the disabled by type of disability (%)

Problems	physical	learning difficulties	ophthalmic difficulties	hearing	speech	mental	multiple	other	missing	Total
economic	36.9	15.0	30.7	36.8	37.0	39.1	29.3	100.0	67.6	36.0
social	3.6	10.0	2.3	2.9	5.4	2.3	1.7	0.0	11.8	4.1
medical	6.6	3.3	5.7	4.4	5.4	2.3	5.2	0.0	20.6	5.7
psychological	25.9	25.0	34.1	29.4	22.8	35.9	20.7	0.0	0.0	26.7
other	13.5	31.7	17.0	10.3	18.5	13.3	15.5	0.0	0.0	15.0
missing	13.5	15.0	10.2	16.2	10.9	7.0	27.6	0.0	0.0	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Chi-square=111.009, p=0)

Problems facing the disabled by the age groups

It is clear that the magnitude of the economic problem increases with the increase in the age of the disabled (Table.15). The social problem is most significant at the age group between 6-18 years as the disabled is at schooling age and struggles for acceptance within a wider social environment. We can see also that medical problem is most significant for those less than 5 years old, and finally psychological problems are more significant for those above the age of 18 (Table.15). The difference in the type of problems faced in relation to age is statistically significant ($p=0$).

Table.15 Problems facing the disabled by age groups (%)

	less than 5 years	6-18 years	more than 18 years	Total
economic	23.8	33.1	40.9	36.0
social	1.0	6.0	3.6	4.1
medical	12.9	3.2	5.7	5.7
psychological	13.9	28.5	28.5	26.7
other	31.7	18.7	8.6	15.0
missing	16.8	10.6	12.8	12.5
Total	100.0	100.0	100.0	100.0

(Chi-square=67.494, p=0)

3.12. Problems facing the family of the disabled

Nevertheless, the major problem facing the family in taking care of the disabled is also economic (63.9%), followed by psychological 10.5%, medical 5%, social .5%, and by 8.1% that is related to other types of problems (Fig.18).

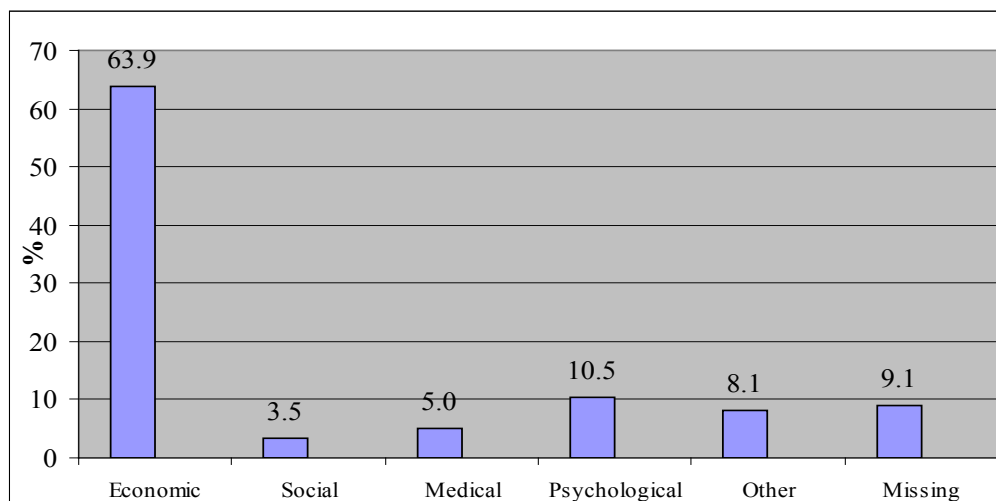


Fig.18 Problems family facing in taking care of the disabled

Problems faced by the family by the type of disability

When we look at the problems faced by the family in taking care with the disabled according to the type of disability we can see that also economic problems (63.9%) are the major obstacle (Table.16). Except for the families of those of ophthalmic disabilities and the families of disabled having other types of disabilities, are facing psychological problems. A highly significant statistical difference in the type of problem faced by families in relation to the type of disability is founds ($p=0$).

Table.16 Problems facing the family by type of disability (%)

	physical	learning difficulties	ophthalmic difficulties	hearing	speech	mental	multiple	other	missing	Total
economic	65.3	45.0	65.9	67.6	64.1	58.6	65.5	100.0	85.3	63.9
social	3.3	15.0	2.3	0.0	0.0	4.7	3.4	0.0	0.0	3.5
medical	5.1	5.0	8.0	4.4	4.3	3.1	3.4	0.0	8.8	5.0
Psych.	7.7	20.0	4.5	4.4	15.2	21.1	5.2	0.0	2.9	10.5
other	8.4	10.0	12.5	8.8	8.7	6.3	3.4	0.0	2.9	8.1
missing	10.2	5.0	6.8	14.7	7.6	6.3	19.0	0.0	0.0	9.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Chi-square=95.750, $p=0$)

Problems faced by the family by the gender of disabled

Still, if we look at the problems faced by the family in taking care of the disabled according to the gender of the disabled we can see that there is similarity in the importance (%) of the problems faced by the family in taking care of males and females who are disabled (Table.17). There is not any statistical significant difference between the problems faced by the family in relation to the gender of the disabled ($p=0.477$).

Table.17 Problems facing the family by gender of disabled (%)

	Male	Female	Total
Economic	63.0	65.3	63.9
Social	3.8	3.0	3.5
Medical	5.5	4.0	5.0
Psychological	11.3	9.3	10.5
Other	6.9	10.0	8.1
Missing	9.5	8.3	9.1
Total	100.0	100.0	100.0

(Chi-square=4.518, p=0.477)

Problems faced by the family by the age of disabled

But when we look at the problems faced by the family in taking care of the disabled according to the age groups of the disabled we see that there is a significant statistical difference between the problems faced by the family in relation to the age groups of the disabled ($p=0.005$). While economic problem is the most significant for all the families of disabled persons, the second important problem for the families of those below the age of 5 is medical, and for those with older disabled persons is related to psychological problems (Table.18).

Table.18 Problems facing the family by disabled age groups (%)

	less than 5 years	6-18 years	more than 18 years	Total
Economic	58.4	60.6	67.5	63.9
Social	0.0	6.3	2.4	3.5
Medical	10.9	4.2	4.0	5.0
Psychological	8.9	12.7	9.5	10.5
Other	11.0	22.0	32.0	65.0
Missing	11.0	24.0	38.0	73.0
column	100.0	100.0	100.0	100.0

(Chi-square 25.224, $p=0.005$)

Problems faced by the family and by the income level of family

As for the problems faced by the family of disabled in relation to the income level of the family, we can see that the significance of the economic problem increases with the decreases in the income level of families (Table.19). On the contrary, the significance of the second problem, the psychological problem, increases with the increase in the income level of the families. Similarly, the significance of the medical problem increases with increase in the income level of the family. Social problem is more significant for the families with fair income level. As we can see from the results, the relationship between the problems faced by families and the income level of the families is highly significant ($p=0$).

Table.19 Problems facing the family by income level

	good	fair	bad	missing	Total
economic	36.2	63.5	74.3	55.6	63.9
social	3.4	4.8	0.9	3.2	3.5
medical	10.3	4.3	3.6	9.5	5.0
psychological	29.3	10.6	5.9	9.5	10.5
other	12.1	8.2	7.7	4.8	8.1
missing	8.6	8.6	7.7	17.5	9.1
Total	100.0	100.0	100.0	100.0	100.0

(Chi-square=56.711, $p=0$)

3.13. Causes of disability

In this section the data about the causes of disability as perceived by the families and according to the CBR team assessment of disabled are presented.

The reasons for the disabilities as they perceived by the families are as follows: 27.5% of the families attributed disability to congenital and genetic in connection with consanguineous marriages, 23.7% attributed it to illness complications, 5.7% to medical errors, 4% to falling accidents, 2.5% to Intifada causalities, 2.4% to work accidents, 2.1% attributed it to socio-cultural and religious beliefs (e.g. myths), and 2% attributed it to traffic accidents (Fig.19).



Fig.19 Family perception about the causes of disability

However, the causes of disability according to the CBR assessment were as follows: 36.2% were due to congenital and genetic, 27.3% were due to illness complications, 6.7% were due to falling accidents, were due to 3.3% Intifada injuries, were due to 2.6% traffic accidents, 2.2% were due to work accidents, 1.6% were due to medical errors, 15% were due to other reasons (Fig.20). These results are very similar to national figures, where the major cause for disability is congenital 36.8%, followed by 34.1% to illness, 5.5% due to the conflict (Intifada), 3.6% due to birth related, 3.3% due to traffic accidents, 3.2% due to work accidents, and 11.9% due to other types of accidents and causes (PCBS, 2000).

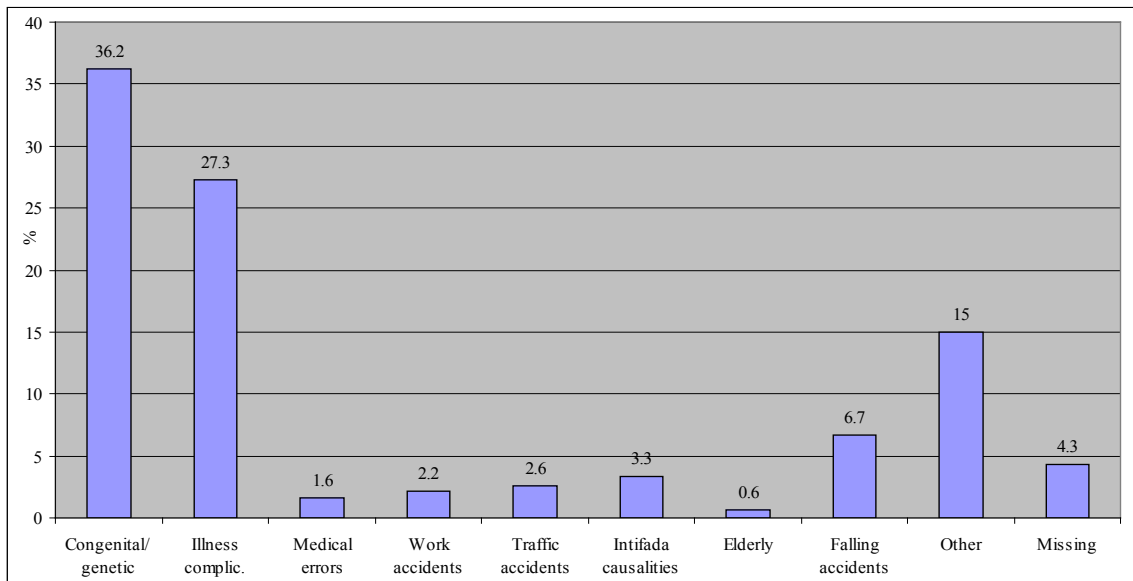


Fig.20 Causes of disability according to the CBR team assessment

Causes of disability by gender

It is important to look at the cause of disability, as assessed by the CBR assessment according to the disabled gender in order to have clear idea about the difference in the rate of disability according to gender. We can see that, the percentage of traffic, work, and falling accidents, as well as Intifada are higher among males than female (Table.20). In comparison the congenital/genetic factor and illness complications are higher in females. The difference in the cause of disability in relation of the gender of the disabled is statistically significant ($p=0.002$).

Table.20 Causes of disability by gender (%)

	male	female	Total
congenital/genetic	34.0	40.0	36.2
illness complications	25.7	30.0	27.3
medical errors	1.8	1.3	1.6
work accidents	2.8	1.3	2.2
traffic accidents	3.6	1.0	2.6
Intifada causalities	5.1	0.3	3.3
elderly	0.6	0.7	0.6
falling accidents	7.5	5.3	6.7
other	14.0	16.7	15.0
missing	4.9	3.3	4.3
Total	100.0	100.0	100.0

(Chi-square=26.170, $p=0.002$)

3.14. Disabled conditions

This section presents the results about the place where the disabled is being looked after and by whom. The results also show that while 90% of the disabled resides at home, only 1.4% stays at special institutions (Fig.21). Meanwhile, 44% of the disabled persons are taken care by their mothers, 3% by their brothers or sisters, 2% by their fathers, and 29.8% don't need special care (Fig.22).

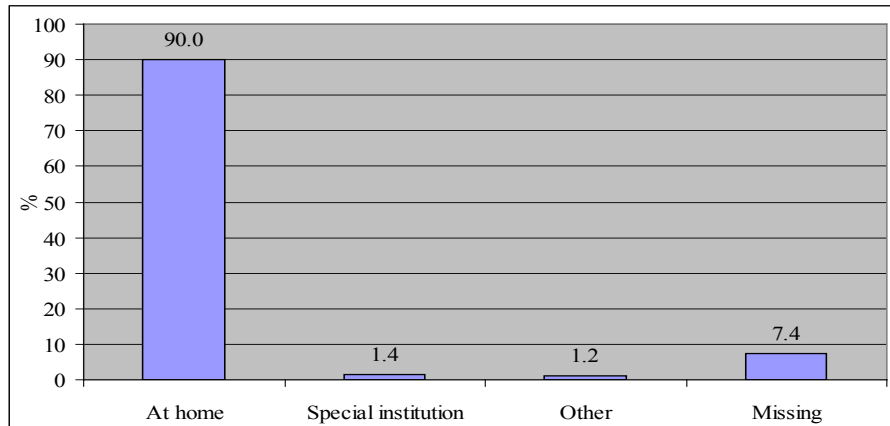


Fig.21 Place where the disabled resides

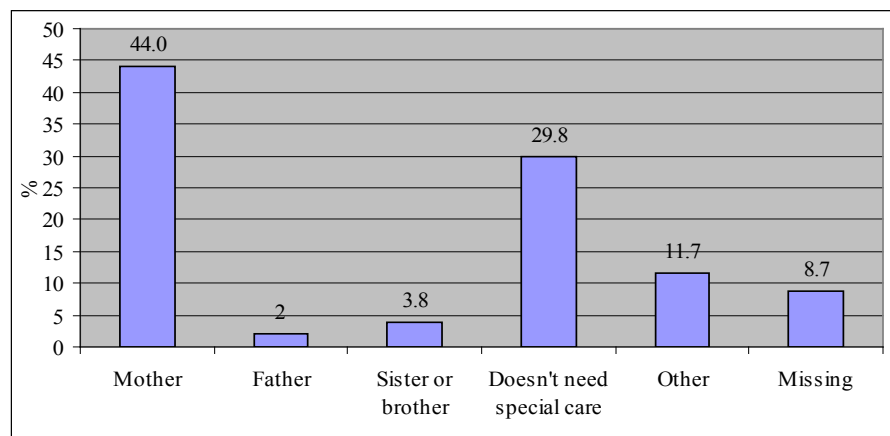


Fig.22 Person taking care of the disabled

3.15. Services provided for the disabled

As for the services received by the disabled persons, it was indicated that 60.5 % of them received care earlier, 19% are receiving currently, and 13.9% haven't received any care (Fig.23). No statistical significant relationship between receiving care and different socio-economic factors including the disabled gender, age, father or mother job, father or mother level of education, family income level, or with the duration of disability was found. Nonetheless, statistical significant relationships were found with the type of disability (Table.21) Chi-square=44.455, $p=0.007$), with villages (Chi-square=331.656, $p=0$) (Table.22) and with districts (Chi-square=22.237, $p=0$) (Table.23).

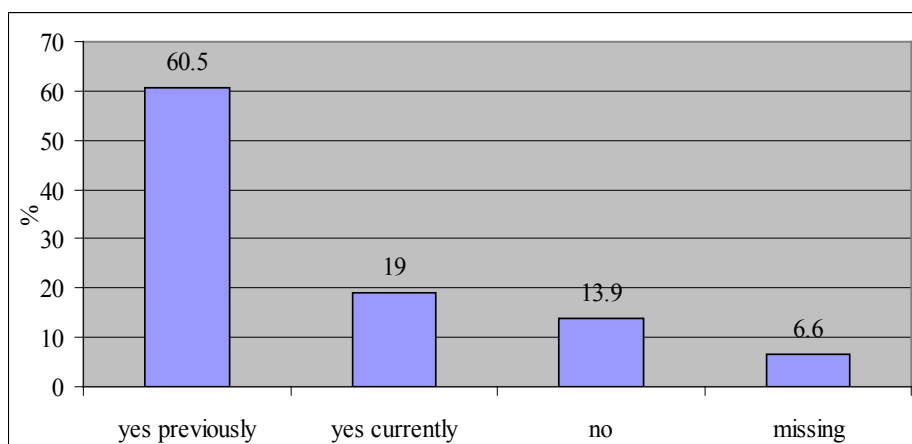


Fig.23 Whether the disabled received care

Table.21 Type of disability by whether the disabled received care (%)

Type of disability	yes previously	yes currently	no	missing	Total
Physical	62.8	19.3	9.9	8.0	100.0
Learning difficulties	60.0	15.0	21.7	3.3	100.0
Ophthalmic difficulties	71.6	18.2	8.0	2.3	100.0
Hearing	51.5	29.4	13.2	5.9	100.0
Speech	53.3	18.5	19.6	8.7	100.0
Mental	60.2	21.1	14.1	4.7	100.0
Multiple	63.8	8.6	13.8	13.8	100.0
Other	50.0	0.0	50.0	0.0	100.0
Missing	50.0	17.6	29.4	2.9	100.0
Total	60.5	19.0	13.9	6.6	100.0

(Chi-square=44.455, p=.007)

Table.22 Whether the disabled received care by district (%)

	yes previously	yes currently	no	missing	Total
Tulkarm	61.7	18.2	10.2	10.0	100.0
Qalqiliya	59.4	19.8	17.6	3.2	100.0
Total	60.5	19.0	13.9	6.6	100.0

(Chi-square=22.237, p=0.0)

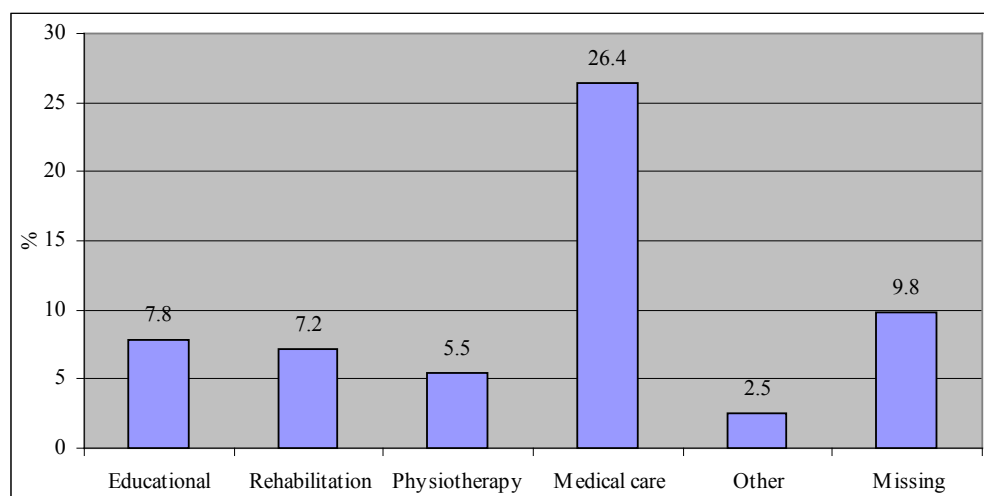
Table.23 Whether the disabled received care by village (%)

	yes previously	yes currently	no	missing	Total
Faroun	18.8	16.7	8.3	56.3	100.0
Shufah	38.9	11.1	22.2	27.8	100.0
Ezbit Shufah	93.3	6.7	0.0	0.0	100.0
Ar-ras	50.0	37.5	12.5	0.0	100.0
Kafir Sour	70.0	20.0	10.0	0.0	100.0
Khirbt Jubara	50.0	0.0	50.0	0.0	100.0
Falama	80.0	5.0	15.0	0.0	100.0
Gafin	69.2	18.3	11.5	1.0	100.0
Al-nazlsh Sharqiya	68.2	13.6	13.6	4.5	100.0
Nazlit Issa	67.3	27.3	3.6	1.8	100.0
Zita	57.9	21.1	17.5	3.5	100.0
Baqa Al-sharqyah	80.0	11.7	3.3	5.0	100.0
Al-fundq	82.4	0.0	11.8	5.9	100.0
Kafir Laqif	57.1	14.3	28.6	0.0	100.0
Far>ata	52.2	30.4	17.4	0.0	100.0
Ematin	58.7	28.3	13.0	0.0	100.0
Kafir Qadoum	56.1	26.3	12.3	5.3	100.0
Jinsafut	45.5	31.8	13.6	9.1	100.0
Ezbit Salman	42.9	35.7	14.3	7.1	100.0
Ras-atyah	40.5	35.1	21.6	2.7	100.0
Ras-Tirah	25.0	50.0	25.0	0.0	100.0
Al-Dabaa	40.0	20.0	20.0	20.0	100.0
Ezbit-Ashqar	40.0	20.0	20.0	20.0	100.0
Hajah	64.7	8.8	20.6	5.9	100.0
Jit	85.7	8.6	5.7	0.0	100.0
Bit Amin	75.0	0.0	25.0	0.0	100.0
Azoun Atmeh	50.0	17.6	29.4	2.9	100.0
Total %	60.5	19.0	13.9	6.6	100.0

(Chi-square=331.656, p=0.0)

3.16. Type and source of services currently received

As for the type of services the disabled currently receiving (only for those receiving care currently), 26.4% are medical services, 7.8% are educational, 7.2% are educational, 7.2% is related to rehabilitation, and 5.5% is related to physiotherapy (Fig.24). It is evident that there is great focus on medical care and less attention to other different types of services e.g. educational, rehabilitation, social and psychological care.

**Fig.24 Type of services the disabled is currently receiving**

When we look at the source of services provided we can see that the major source of services provided for the disabled is by local non-governmental institutions (48.5%), followed by the public (governmental) sector (35.9%), and finally is by the international institutions (3.2%) (Fig.25).

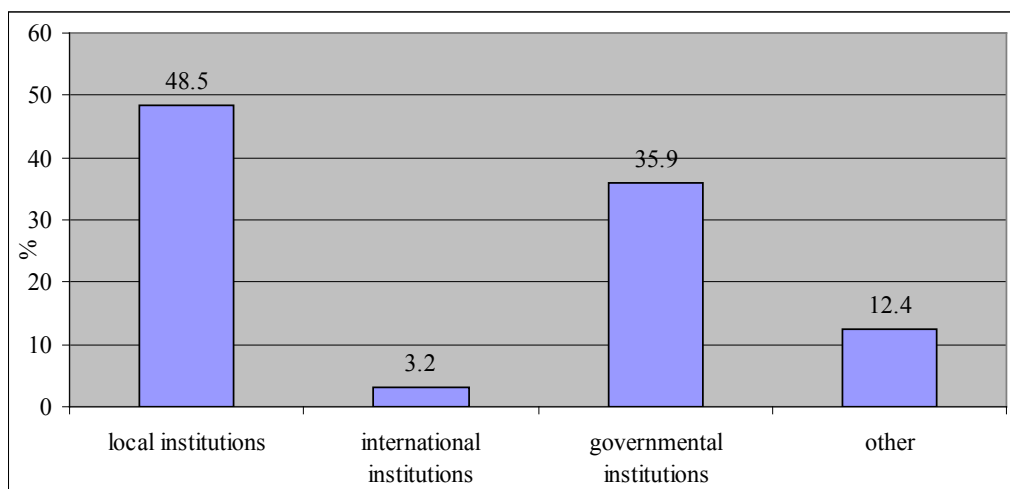


Fig.25 Source of service provided for those currently receiving care

3.17. Reasons for not receiving care

According to the families, the reasons for not receiving care are: 28% economic, 11.2% don't need care, 7.2% lack of services, 6.6% lack of knowledge about services, 3.1% transportation difficulties, 1.7% lack of time, 1.1% provider refuses to provide care, 15.1% is related to other reasons (Fig.26). The results show that there are significant statistical relationships between the reasons for not receiving care and the disabled gender (Chi-square=26.519, p=0.001), type of disability (Chi-square=108.802, p=0) (Table.24), village (Chi-square=591.221, p=0) (Table.25), district (Chi-square=157.820, p=0), family economic level (Chi-square=54.552, p=0), years of disability (Chi-square=45.843, p=0.005). But, there is not any statistical significant relationships with the disabled age, mother's age, father's age, job, or level of education were found.

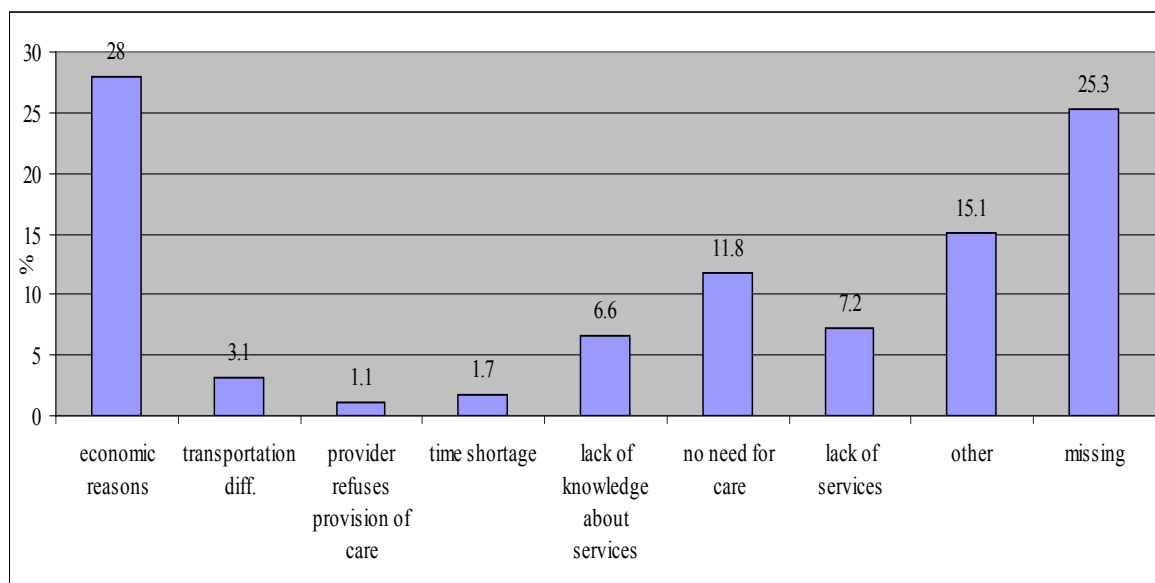


Fig.26 Reasons for not receiving care

Table.24 Type of disability by reason for not receiving care (%)

Type of disability	economic reasons	transportation difficulties	provider refuse to provide care	time shortage	lack of knowledge about services	no need for care	lack of services	other	missing	Total
Physical	27.7	2.6	1.5	1.8	3.6	9.9	4.4	15.3	33.2	100.0
Learning difficulties	23.3	3.3	0.0	0.0	13.3	18.3	5.0	20.0	16.7	100.0
Ophthalmic difficulties	18.2	6.8	0.0	3.4	6.8	17.0	12.5	13.6	21.6	100.0
Hearing	25.0	4.4	0.0	1.5	2.9	11.8	8.8	13.2	32.4	100.0
Speech	30.4	2.2	0.0	3.3	9.8	7.6	8.7	19.6	18.5	100.0
Mental	29.7	2.3	1.6	1.6	7.0	11.7	6.3	19.5	20.3	100.0
Multiple	31.0	0.0	1.7	0.0	8.6	13.8	10.3	6.9	27.6	100.0
Other	0.0	0.0	0.0	0.0	0.0	25.0	50.0	0.0	25.0	100.0
Missing	55.9	5.9	5.9	0.0	11.8	8.8	5.9	0.0	5.9	100.0
Total %	28.0	3.1	1.1	1.7	6.6	11.8	7.2	15.1	25.3	100.0

(Chi-square=108.802, p=0)

Table. 25Village name by reason for the disabled for not receiving care (%)

	Economic reasons	Transportation difficulties	Provider refuse provision of care	Time shortage	Lack of knowledge	No need for care	Lack of services	Other	Missing	Total
Faroun	0.9	0.0	11.1	7.1	1.9	5.3	3.4	1.6	16.7	6.0
Shufah	1.8	0.0	0.0	0.0	1.9	0.0	5.2	0.0	4.9	2.2
Ezbit Shufah	2.2	4.0	0.0	7.1	0.0	3.2	3.4	0.0	1.5	1.9
Ar-ras	1.3	4.0	0.0	0.0	1.9	0.0	0.0	2.5	0.0	1.0
Kafir Sour	1.3	0.0	0.0	0.0	0.0	4.2	0.0	1.6	0.5	1.2
Khirbt Jubara	0.9	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.5
Falameya	5.3	0.0	11.1	0.0	0.0	0.0	1.7	1.6	2.0	2.5
Gafin	11.1	4.0	22.2	0.0	15.1	12.6	10.3	7.4	20.1	12.9
Al-nazlsh Sharqiya	0.9	8.0	0.0	7.1	7.5	3.2	8.6	0.0	2.5	2.7
Nazlit Issa	3.1	8.0	0.0	0.0	5.7	5.3	1.7	8.2	13.2	6.8
Zita	4.0	4.0	0.0	0.0	5.7	5.3	10.3	6.6	12.3	7.1
Baqa Al-sharqyah	3.5	4.0	11.1	0.0	5.7	6.3	10.3	4.9	14.2	7.4
Al-fundq	1.3	4.0	0.0	7.1	1.9	5.3	0.0	4.9	0.0	2.1
Kafir Laqif	3.5	0.0	0.0	0.0	1.9	3.2	1.7	12.3	0.0	3.5
Far>ata	2.7	16.0	0.0	0.0	3.8	2.1	5.2	4.1	0.5	2.9
Ematin	4.0	4.0	0.0	28.6	15.1	8.4	1.7	12.3	0.0	5.7
Kafir Qadoum	8.0	4.0	11.1	7.1	3.8	4.2	5.2	12.3	5.9	7.1
Jinsafut	6.2	0.0	0.0	14.3	0.0	0.0	1.7	4.1	0.0	2.7
Ezbit Salman	3.5	8.0	0.0	0.0	1.9	0.0	1.7	0.0	1.0	1.7
Ras-atyah	9.7	8.0	11.1	0.0	9.4	3.2	1.7	0.0	1.5	4.6
Ras-Tirah	1.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Al-Dabaa	1.3	4.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.6
Ezbit-Ashqar	0.0	4.0	0.0	7.1	3.8	0.0	1.7	0.0	0.0	0.6
Hajah	1.3	0.0	0.0	7.1	5.7	10.5	8.6	6.6	2.0	4.2
Jit	4.9	0.0	0.0	0.0	0.0	11.6	12.1	4.9	0.0	4.3
Bit Amin	7.5	0.0	0.0	0.0	0.0	1.1	0.0	4.1	0.5	3.0
Azoun Atmeh	8.4	8.0	22.2	0.0	7.5	3.2	3.4	0.0	1.0	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Chi-square=591.221, p=0)

3.18. Disabled needs

One crucial aspect of the survey (and of the CBR project) aims at identifying different services needs of the disabled. Therefore, based on the assessment done by the CBR team (including a physician, physiotherapist and other health professionals) the services need of each disability case was identified. These needs were identified as follows: 26.9% of the disabled need medical care, 17.2% need supporting equipment (including splints, wheelchairs, crutches, walkers, hearing support devices and glasses), 13.6% need speech therapy, 8.7% need rehabilitation, 8.7% need physiotherapy, 8.3% need referral to specialized institution, 2.6% need prostheses and corrective shoes, 2.2% need psychiatric care, 1.7% need social care, 1% need adapting environment to the disabled needs, 0.7% need occupational care, 0.6% need nothing, and 0.1% need a job (Fig.27).

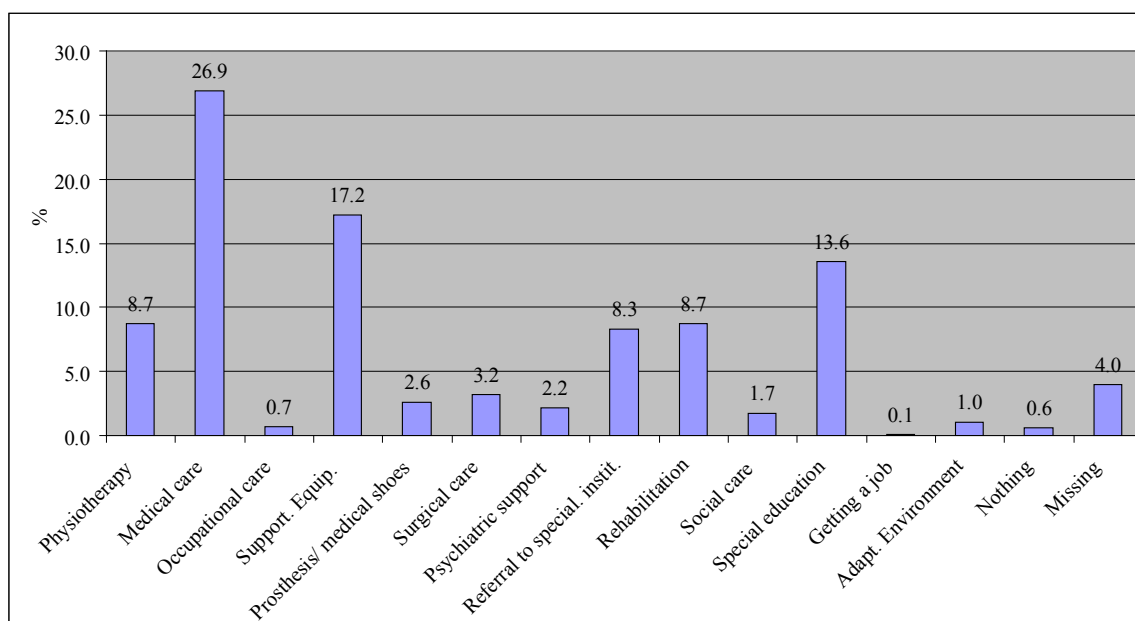


Fig.27 Disabled persons needs according to the CBR team assessment

Needs by type of disability

Table (26) shows the kind of services needed by the type of disability. As can be expected, there is significant difference in the needs of the disabled persons in relation to the type of their disabilities (Table.26) (Chi-square = 1508.732, p=0). Moreover, there is a significant difference in relation to villages (Chi-square=1604.815, p=0) (Table.27), districts (Chi-square =54.887, p=0), age groups of the disabled (Chi-square=84.018, p=0) (Table.28), years of disability (Chi-square =803.757, p=0). However, there is not any significant difference in the kind of needs in relation to the gender (Chi-square =22.981, p=0.061) or in relation to the family economic level (Chi-square=49.159, p=0.208).

Table.26 Disabled persons needs by type of disability

	Physical	Learning diff.	Ophthalmic diff.	Hearing	Speech	Mental	Multiple	Other	Missing	Total
Physiotherapy	66	0	0	0	0	0	4	0	0	70
	24.1%	0.0%	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	8.7%
Medical care	49	15	35	14	15	67	18	4	0	217
	17.9%	25.0%	39.8%	20.6%	16.3%	52.3%	31.0%	100.0%	0.0%	26.9%
Occupational care	3	1	0	0	0	2	0	0	0	6
	1.1%	1.7%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.7%
Supporting equipment	60	0	28	39	6	2	4	0	0	139
	21.9%	0.0%	31.8%	57.4%	6.5%	1.6%	6.9%	0.0%	0.0%	17.2%
Prosthesis/ medical shoes	20	0	0	0	0	1	0	0	0	21
	7.3%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	2.6%
Surgical care	13	0	5	2	0	2	4	0	0	26
	4.7%	0.0%	5.7%	2.9%	0.0%	1.6%	6.9%	0.0%	0.0%	3.2%
Psychiatric support	1	2	1	0	0	14	0	0	0	18
	0.4%	3.3%	1.1%	0.0%	0.0%	10.9%	0.0%	0.0%	0.0%	2.2%
Ref. to special institution	6	5	11	4	15	17	9	0	0	67
	2.2%	8.3%	12.5%	5.9%	16.3%	13.3%	15.5%	0.0%	0.0%	8.3%
Rehabilitation	41	4	0	2	4	10	9	0	0	70
	15.0%	6.7%	0.0%	2.9%	4.3%	7.8%	15.5%	0.0%	0.0%	8.7%
Social care	1	4	3	0	0	6	0	0	0	14
	0.4%	6.7%	3.4%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	1.7%
Special education	6	28	3	7	52	6	8	0	0	110
	2.2%	46.7%	3.4%	10.3%	56.5%	4.7%	13.8%	0.0%	0.0%	13.6%
Getting a job	1	0	0	0	0	0	0	0	0	1
	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Adapting environ. to disabled needs	5	1	0	0	0	0	2	0	0	8
	1.8%	1.7%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	1.0%
None	2	0	2	0	0	1	0	0	0	5
	0.7%	0.0%	2.3%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.6%
Missing	0	0	0	0	0	0	0	0	34	34
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	4.2%
Total	274	60	88	68	92	128	58	4	34	806
% column	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Chi-square= 1508.732, p=0)

Table.27 Disabled persons needs by age groups (%)

	less than 5 years	6-18 years	more than 18 years	Total
Physiotherapy	12.9	8.1	8.1	8.7
Medical care	25.7	22.2	30.4	26.9
Occupational care	1.0	0.7	0.7	0.7
Supporting equipment	10.9	14.8	20.4	17.2
Prosthesis/medical shoes	2.0	2.5	2.9	2.6
Surgical care	1.0	3.5	3.6	3.2
Psychiatric support	0.0	1.8	3.1	2.2
Referral to specialized institution	8.9	8.5	8.1	8.3
Rehabilitation	9.9	8.5	8.6	8.7
Social care	.0	1.4	2.4	1.7
Special education	18.8	24.6	5.0	13.6
Getting a job	0.0	0.0	0.2	0.1
Adapting environment to disabled needs	0.0	0.7	1.4	1.0
Non	0.0	0.4	1.0	0.6
Missing	8.9	2.5	4.3	4.2
Total	100.0	100.0	100.0	100.0

(Chi-square=84.018, p=0)

Table.28 Disabled persons needs by village (%)

	physiotherapy	medical care	occupational care	supporting equipments	prosthesis / medical shoes	surgical care	psychiatric support	referral to specialized institutions	rehabilitation	social care	sp education	getting a job	adapting environment to the disabled needs	non missing	missing	Total
Farun	8.3	12.5	0.0	16.7	10.4	8.3	4.2	14.6	4.2	2.1	10.4	0.0	4.2	4.2	0.0	100.0
Shufah	0.0	33.3	0.0	5.6	0.0	11.1	0.0	5.6	22.2	0.0	22.2	0.0	0.0	0.0	0.0	100.0
Ezbit Shufah	6.7	6.7	0.0	13.3	0.0	13.3	0.0	0.0	20.0	0.0	33.3	0.0	0.0	6.7	0.0	100.0
Ar-ras	0.0	25.0	0.0	25.0	0.0	12.5	0.0	0.0	25.0	0.0	12.5	0.0	0.0	0.0	0.0	100.0
Kafir Sour	0.0	0.0	10.0	10.0	0.0	0.0	10.0	20.0	20.0	20.0	10.0	0.0	0.0	0.0	0.0	100.0
Khirbt Jubara	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Falamyia	15.0	25.0	0.0	15.0	0.0	20.0	0.0	5.0	15.0	0.0	5.0	0.0	0.0	0.0	0.0	100.0
Gafin	11.5	32.7	1.0	24.0	1.0	1.9	0.0	4.8	5.8	0.0	17.3	0.0	0.0	0.0	0.0	100.0
Al-nazlsh Sharqiya Nazlit Issa	0.0	31.8	0.0	27.3	0.0	0.0	0.0	4.5	13.6	9.1	9.1	0.0	0.0	4.5	0.0	100.0
Zita	8.8	61.4	0.0	14.0	0.0	0.0	1.8	3.5	3.5	0.0	7.0	0.0	0.0	0.0	0.0	100.0
lBaqaa Al-sharqyah	5.0	21.7	0.0	25.0	6.7	0.0	1.7	16.7	15.0	0.0	8.3	0.0	0.0	0.0	0.0	100.0
Al-fundq	5.9	35.3	0.0	5.9	0.0	0.0	23.5	11.8	0.0	0.0	17.6	0.0	0.0	0.0	0.0	100.0
Kafir Laqif	14.3	50.0	3.6	10.7	0.0	7.1	0.0	3.6	0.0	3.6	7.1	0.0	0.0	0.0	0.0	100.0
Far>ata	8.7	26.1	0.0	17.4	0.0	0.0	4.3	8.7	0.0	13.0	21.7	0.0	0.0	0.0	0.0	100.0
Ematin	2.2	32.6	0.0	17.4	2.2	4.3	2.2	10.9	6.5	6.5	15.2	0.0	0.0	0.0	0.0	100.0
Kafir Qadoum	19.3	24.6	0.0	31.6	0.0	1.8	1.8	3.5	7.0	0.0	8.8	0.0	1.8	0.0	0.0	100.0
Jlinsafut	4.5	9.1	0.0	22.7	4.5	0.0	0.0	18.2	4.5	0.0	31.8	0.0	4.5	0.0	0.0	100.0
Ezbit Salman Ras- atyah Ras-Tirah Al-Dabaa Ezbit-Ashqar	50.0	14.3	0.0	0.0	0.0	7.1	0.0	7.1	0.0	0.0	21.4	0.0	0.0	0.0	0.0	100.0
	0.0	24.3	2.7	16.2	0.0	0.0	5.4	5.4	16.2	0.0	27.0	0.0	2.7	0.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	0.0	60.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	20.0	0.0	20.0	0.0	0.0	100.0
Hajah	5.9	23.5	2.9	26.5	20.6	2.9	2.9	8.8	0.0	0.0	5.9	0.0	0.0	0.0	0.0	100.0
Jit	11.4	17.1	0.0	14.3	0.0	11.4	2.9	11.4	5.7	5.7	14.3	0.0	2.9	2.9	0.0	100.0
Bit Amin	0.0	16.7	0.0	0.0	0.0	0.0	4.2	16.7	29.2	0.0	29.2	0.0	4.2	0.0	0.0	100.0
Azoun Atmeh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		100.0
Total	8.7	26.9	0.7	17.2	2.6	3.2	2.2	8.3	8.7	1.7	13.6	0.1	1.0	0.6	4.2	100.0

(Chi-square=1604.815, p=0)

4. Discussion and Conclusions

The average disability rate in the surveyed villages of Qalqilia and Tulkarm Districts (1.7%) is similar to national level and consistent with other surveys conducted in the mid-1990s in Northern, Central and Southern Districts of the West Bank (NRCCR, 1994; CRCR, 1995; SRCR, 1996). In addition to that, physical disability (34 % of the total) also emerges as the major type of disability.

Disabilities among children (under the age of 18) forms about half of the total disabilities (47.8%). This necessitates special attention to children based community rehabilitation programme that includes educational and social services along with the rehabilitation needs of this group.

The prevalence of disability was found considerably higher among males than females (62.8%: 37.2% respectively). This might be explained by the higher exposure of males to work and traffic accidents, Intifada casualties among males, as well as possible underreporting of female disabilities due to fear of stigma. The study showed that the average age of fathers and mothers reveal mid-aged pattern (45.2 years for fathers and 41.6 years for mothers), and also showed a higher educational level in favour of fathers than mothers (8 and 4.4 years education in average respectively).

The results illustrated inadequate level of social integration of the disabled into society. This has been evident through low participation in family activities (50% participate always and 19% sometimes), lower participation in community activities (only 39.3% are always taking part in community activities and 21.1% are participating sometimes) and lower enrolment at school for those at schooling age (58.8% of those between 6-18 years old). In addition to that, very limited disabled persons has a job or income on regular bases (7.9%) and 6.6% has sometimes a job or income. This shows the urgent need for supporting the mechanisms of enhancing the integration of the disabled in the society's activities including providing education and appropriate job opportunities, also there is a major need for functionalising the rights of disabled as indicated in laws, and there is a need for raising the community awareness to boost the acceptance of the disabled on equal bases in the society.

The high dependency of the disabled on others for performing daily activities e.g. eating, drinking, wearing, cleansing (only 22.6% of them can perform their daily activities by themselves, 20.5% can sometimes, and the rest are totally dependent on others) necessitates urgent provision of rehabilitation services for the disabled.

The study illustrated high prevalence of consanguinity among the parents of the disabled; it is known that consanguinity is an important factor causing congenital disabilities. Consanguinity among parents is a typical characteristic of Palestinian society where 39% of the parents of disabled are first degree and 11.8% are second degree relatives in comparison with the national rate 45.2% (marriage among first cousin or further relative) in 2004 (PCBS, 2006). It is noteworthy that consanguineous

marriages are more common in rural areas in Palestine and this might explain the higher percentage of disabilities attributed to genetic and congenital reasons (36.2%) in the studied rural communities. The existence of more than one disabled person at the same family (32%) is a proof for the relationship between consanguineous marriages and disabilities in these localities, although the relationship was not found statistically significant. What is interesting is that the families in the studied communities are aware of this fact, as 27.5% of them attributed the major reason for disability to congenital factors due the kinship between the parents. Yet, the study did not collect information about the age of parents at marriages; the issue does not allow seeking relationship between early marriages and disability. These results highlight the importance of early detection and treatment of disabilities and in this respect there is a need for greater focus on health promotion and education to increase the awareness of people to the issue.

The second main reason for disabilities (27%) was attributed to illness complications according to both the families and to the CBR team. This is explained by the lack of services and limitations of accessibility to health care of services in those communities, especially after establishing the barrier, the Annexation Wall, plus the hard economic conditions.

Looking at the socio-economic conditions of the families of the disabled persons, it is evident that the disabled live in crowded families (average size of the family is 6.67 persons and average of 2.2 persons per room at house). The economic condition of the families is relatively harsh (27.5% of the families rated their income as bad, and 57.4% rated as fair), 37.8% of the families are without any person working, 54.5% have only one person working and 7.7% have two or more working persons at the family. In particular, 38.3% of the fathers and 95% of the mothers are unemployed. Consequently, the economic condition emerges as the major problem faced by the disabled and his/her family and also the major obstacle for receiving care.

About 90% of the disabled resides at home, only 1.4% of them stay at special institutions. This is an indicator of underdevelopment of institutional care in the area. Therefore, the mother bears the major role in taking care of the disabled, where 44% of disabled persons are looked after by their mothers.

Regarding the services provided to the disabled, relying on the data from families, the results showed that only 19% are currently receiving some kind of services. These services mainly focus on medical care (26.4%) and less attention is given to psycho-social and rehabilitative care (7.8% educational, 12.7% rehabilitation, and physiotherapy). This shows an important deficiency of the available care system.

As expected NGOs are assuming the major responsibilities in providing care for those with special needs, as the source of care provided is mainly non-governmental(48.5%), public sector (35.9%) and international institutions (3.2%). Most of the NGOs target marginalised groups at the society with focus on the disabled, child, mother and elderly.

As for the type of services needed for the disabled, as indicated by the CBR team, 35% of the disabled persons need medical care and referral to specialized institutions, 17.2% need support equipment (including prosthesis, corrective shoes, splints, wheelchairs, crutches, walkers, hearing support devices and glasses), 13.6% need special education including speech therapy, 8.7% require rehabilitation, 2.2% need psychiatric care, 1.7% need social care, 1% need adapting environment to the disabled needs, 0.7% need occupational care, and 0.1% need a job. This presents a view of the disabled needs and priority areas. It is important to indicate the type of services needed, which correspond to the type of disabilities specified by the team.

5. Recommendations

- ⊙ It is essential to develop a rational and comprehensive community based rehabilitation system supported by intermediate and tertiary care levels including medical and diagnostic services, speech therapy, physiotherapy, occupational and vocational therapy, supporting instruments, along with special education and psychological support. Within that system there is a need for effective referral system between levels of care.
- ⊙ Given that medical care is one of most important needs of the disabled, it is important to give special focus and attention to PHC, especially within that to health promotion and education, early prevention to avoid disabilities, and also to basic health care services.
- ⊙ It is necessary to alleviate the impact of prevalent political situation (the Wall, siege, closure, road blockages etc) on the disabled accessibility to services. In this respect, mobile clinics providing different services (specialized health care services e.g. ophthalmology, orthopaedics, and rehabilitation services) should reach the disabled at their localities.
- ⊙ Community awareness should be raised regarding the rights, needs and those with special needs and attention should be given to promote integration of disabled into the society and allowing them to have proper education, job opportunity, and participate in community activities. Adaptation of the environment e.g. at home, school, public areas to disabled needs is necessary to facilitate social integration.
- ⊙ Measures should be taken to empower the disabled persons and their families economically and to ensure financial accessibility to medical and social care, and to provide economic support to families taking care of persons with disabilities.
- ⊙ It is essential to raise the community awareness on the consequences of consanguineous marriages. Education sector, public and community institutions, in addition to religious groups that should have a role in this area.
- ⊙ There is a need to identify training needs of those working with disabled people and accordingly develop their skills and knowledge through formal and continuous education programmes.
- ⊙ Finally, there is an urgent need for effective coordination and integration mechanisms among all organisations serving those with special needs in particular rehabilitation institutions and programmes, and finally, clear guidelines and comprehensive national rehabilitation policy in Palestine.

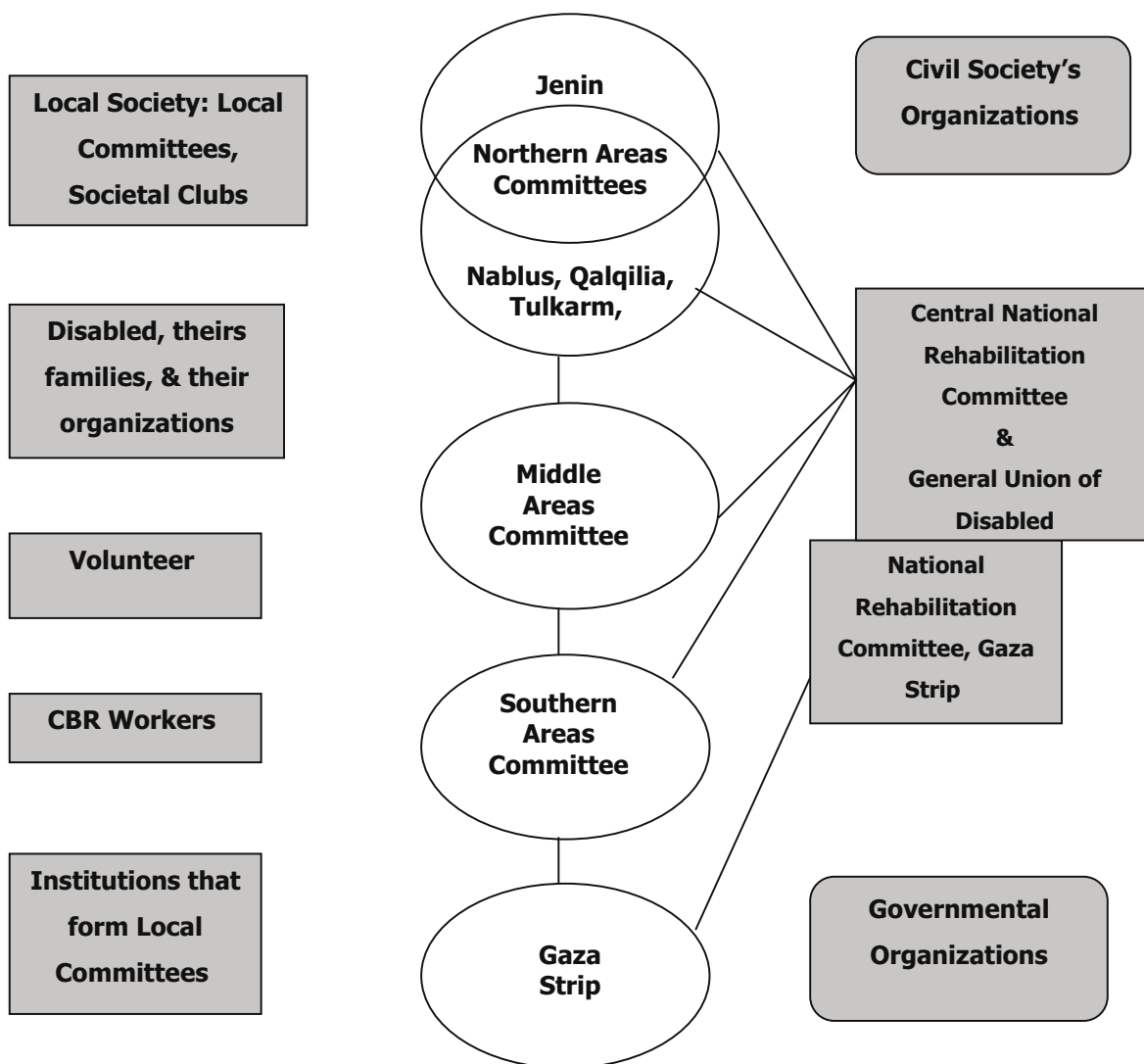
6. References

- ⊙ Al-Baa'lbaki, M. (1987) "Al-Mawrid Modern English – Arabic Dictioanery". 21 Edition, Dar Al-Ilam lel Malayeen. Beirut.
- ⊙ Bsilat, N. (1998) "The Palestinian Disabled General Union Word that was presented at the National Work Workshop, Convened from 16th to 17th January". Rehabilitation Strategies & Policies in Palestine. No. 33 pp. Jerusalem.
- ⊙ Central Regional Committee for Rehabilitation (CRCR). (1995) A Study of 23 Palestinian Villages in the Central District of the West Bank with Special Reference to the Needs of Persons with Disabilities.
- ⊙ Dowlin, SM. (1940) The University of Pennsylvania Today. Philadelphia, University of Pennsylvania Press.
- ⊙ Harami, Gh. (1998) "A Paper on the Reality of the Rehabilitation Services in Palestine that was presented at the National Work Workshop, Convened from 16th to 17th January". Rehabilitation Strategies & Policies in Palestine. No. 42 pp. Jerusalem.
- ⊙ Helander E. (2000) Guest Editorial: 25 Years of Community-Based Rehabilitation. Asia Pacific Disability Rehabilitation Journal. 11(1): 4-9
- ⊙ Helander, E. (1993) Prejudice and Dignity: an introduction to community-based rehabilitation, UNDP New York.
- ⊙ International Labour Organization (ILO). (1994) United Nations Educational Scientific and Cultural Organization (UNESCO), World Health Organization (WHO). Community-Based Rehabilitation for and with people with disabilities. Joint Position Paper. Geneva, Switzerland.
- ⊙ Jarar, A. (2006) "A Paper on Rehabilitation & Care of Those of Special Needs". A Meeting on Priorities & Needs that was presented to the Palestinian NGOs Working the Health Sector.
- ⊙ Miles G, Stephenson P. (2001) Children at risk Children and Disability: volume 3. The Tearfund UK.
- ⊙ Northern Regional Committee for Rehabilitation (NRCR). (1994) A Study of 22 Palestinian Villages in the Jenin District with Special Reference to the Needs of Persons with Disabilities.
- ⊙ Palestinian Central Bureau of Statistics (PCBS). (2000) Persons with disability in the Palestinian Territories. Ramallah – Palestine.
- ⊙ Palestinian Central Bureau of Statistics (PCBS). (2006) Palestine in Figures 2005. Ramallah – Palestine.
- ⊙ Palestinian Central Bureau of Statistics (PCBS). (2006) Demographic Health Survey-2004. Final Report. Ramallah: Palestine.
- ⊙ Piersol, GM. (1952) "Is Physical Medicine oversold?" Archives of Medical Medicine & Rehabilitation, 33; 299.
- ⊙ Quteina, M. (2000) "A View on CBR in Palestine". No. 11 pp.
- ⊙ Southern Regional Committee for Rehabilitation (SRCR). (1996) A Study of 19 Palestinian

Communities in the Southern District of the West Bank with a Special Reference to the Needs of Persons with Disabilities.

- ⊙ The Northern Rehabilitation Regional Committee. (1994) “A Study at 22 Palestinian Villages in Jenin Area with a Major Focus on Those of Special Needs”.
- ⊙ The Office for the Coordination of Humanitarian Affairs (OCHA). (2005) North West Bank Barrier: New Buffer Zone Jenin | Tulkarm | Qalqiliya| Salfit. Available at website: <http://www.humanitarianinfo.org/opt/> (Accessed on 5-6-2005).
- ⊙ World Health Organisation (WHO). (2004) Meeting to develop guidelines for strengthening community based rehabilitation (CBR) programme in developing countries (Poverty Alleviation - Rehabilitation - Equal Rights) Geneva 1st and 2nd November 2004.

Annex.2 The structure of CBR programme in Palestine.



Source: (Quteina, 2000)

