**The Project for the Development and Advancement of the Ministry of Health and Population Geriatric Health Care Centers**

**The Division for Curative Health Services in Collaboration with the World Health Organization**

**Part One : Evaluation of the Centers**

**Introduction:**

The aging trend has called the attention of most governments and decision makers in the region. According to the report by the Central Agency for Public Mobilization and Statistics also known as CAPMAS, the number of elderly in Egypt has reached 6461078 persons and 7.8 % of the population at mid 2013. Aging is characterized by physiological changes affecting the entire body as well as multiple comorbidities that may have typical or atypical presentations. This could affect the functional status and thus independence and quality of life of the elderly person and necessitate a medical approach involving a comprehensive medical assessment by a trained multidisciplinary team. It also necessitates the education of both the elderly and their caregivers and the development of different levels of institutional and home care that fit the needs of different elderly. All this in addition to the increasing number of elderly, and the increasing life expectancy all of which requires increased health care services for this age group.

The Ministry of Health Care and Population has thus proceeded to give special attention to the development of geriatric care units and departments to ensure the ideal implementation of their services through development of their infrastructure and training of the staff and follow up of how the services are met by a group of specialized experts in the this field.

The project of development and modernization of the geriatric health care units and departments is joint effort by the Ministry of Health and Population: the Division for Curative Health Services and the World Health Organization which in turn pays special consideration to geriatric care. The first step pf the project was an overall comprehensive evaluation of the present condition of all of the existing centers and departments and its submission to decision makers for the development of a comprehensive plan for their improvement and maintenance aiming at improving the quality of life of the elderly.

**Objective:**

The aim of this study is an overall and comprehensive assessment of the present condition of the Ministry of Health and Population geriatric health care centers and departments.

**Evaluation Methods:**

1. **Study Design:**

This a descriptive study to assess the Ministry of Health and Population geriatric health care centers and departments.

1. **Timeframe of Study:**

Starting from October 2014 to January 2015.

1. **Site of Study :**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Unit/Department** | **Hospital** | **Governorate** |
| **1** | Suez Geriatric Center | independent | Suez |
| **2** | Geriatric Health Care Unit at Boulak El-dakrour General Hospital | Boulak Eldakrour General Hospital | Giza |
| **3** | Geriatric Health Care Department at El-eman General Hospital | El-eman General Hospital | Assiut |
| **4** | Hoda Talaat Harb Centre for Treatment and Rehabilitation of Elderly (Helwan) | independant | Cairo |
| **5** | Geriatric Health Care Department at Matrouh General Hospital | Matrouh General Hospital | Matrouh |
| **6** | Geriatric Health Care Department at Berket El-sabea General Hospital. | Berket El-sabea General Hospital | Monufia |
| **7** | Port Said Geriatric Health Care Unit | Independent | Port Said |
| **8** | Geriatric Health Care Department at Hehya Central Hospital | Hehya Central Hospital | Al-sharqia |
| **9** | Geriatric Health Care Department at Ismailia General Hospital | Ismailia General Hospital | Ismailia |
| **10** | Geriatric Health Care Center at Ganzour | Independent | Monufia |

1. **Study Sample:**

This study sample included was 10 centers and departments specialized in geriatric health care.

1. **Study Tools:**

Fourteen model forms (appendix 1) were designed to cover all aspects of medical service provided at the centers/dept. This included:

1. Form for evaluation of infrastructure
2. Form for evaluation of human resources
3. Form for evaluation of services
4. Form for evaluation of awareness of service
5. Form for evaluation of progress during patient visit
6. Form for evaluation of medical expenses
7. Form for evaluation of referral system
8. Form for evaluation of booking of medical appointments
9. Form for reporting of number of elderly patients visiting the center in previous three months
10. Form for evaluation of social support
11. Form for evaluation of continuous medical evaluation
12. Form for evaluation of medical archives
13. Form for geriatric care ethics and legislature
14. Form for survey on evaluation of services provided to the elderly by staff members

The Procedural Manual for Geriatric Health Care Centers which is yet to be published by the regional office of the World Health Organization for the East Mediterranean Region has been consulted.

1. **Field Research Teams :**

Field research teams have been assembled to gather information and pay visits to the centers. Each team consists of 3 physicians ( Ministry of Health and Population: The Division for Curative Health Services- Faculty of Medicine Ain Shams University), and an administrator to facilitate the mission. Preparatory meetings were held for the field research teams to assure standard procedure of visits and use of tools.

1. **Field Visits :**

Field visits were carried out between 12/11/2014 and 3/12/2014 as shown below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Research team** | **Governorate** | **Center / hospital** |  |
| Wednesday 12/11/2014 | Dr..Amany Amer  Prof. Dr. Sarah Hamza  Dr. Iman Allbany | Suez | Suez Geriatric Center | **1** |
| Thursday 13/11/2014 | Dr. Amany Amer  Dr. Sherine Mustafa  Dr. Doha Rasheedy | Giza | Geriatric Health Care Unit at Bulaq El-dakrour General Hospital | **2** |
| Sunday 16/11/2014  Monday 17/11/2014 | Dr. .Amany Amer  Prof. Dr. Tamer Fareed  Dr. Ahmed Shawky | Assiut | Geriatric Health Care Department at El-eman General Hospital | **3** |
| Thursday 20/11/2014 | Dr. Amany Amer  Dr. Sherine Mustafa  Dr. Doha Rasheedy | Cairo | Hoda Talaat Harb Centre for Treatment and Rehabilitation of Elderly (Helwan) | **4** |
| Sunday 23/11//2014  Monday 24/11/2014 | Dr. .Amany Amer  Prof. Dr. Tamer Fareed  Dr. Ahmed Shawky | Matrouh | Geriatric Health Care Department at Matrouh General Hospital | **5** |
| Wednesday 26/11/2014 | Dr. Amany Amer  Dr. Ahmed Shawky  Dr. Manal Al-Attar | Menofia | Geriatric Health Care Department at Berket El-sabea General Hospital. | **6** |
| Thursday 27/11/2014 | Dr. Amany Amer  Dr. Manar Mustafa  Dr. Mervat Sedky | Port Said | Port Said Geriatric Health Care Center | **7** |
| Saturday 29/11/2014 | Dr. Amany Amer  Dr. Sherine Mustafa  Dr. Doha Rasheedy | Al-sharqia | Geriatric Health Care Department at Hehia Central Hospital | **8** |
| Sunday 30/11/2014 | Dr. Amany Amer  Prof. Dr. Tamer Fareed  Dr. Iman Allbany | Ismailia | Geriatric Health Care Department at Ismailia General Hospital | **9** |
| Wednesday 3/12//2014 | Dr. Amany Amer  Prof. Dr. Sarah Hamza  Dr. Manal Al-Attar | Menofia | Geriatric Health Care Center at Janzur | **10** |

1. **Data Analysis:**

Data in each form was encoded and was mostly descriptive so repetition/recurrences and percentages were used. Data was presented in the form of collective tables and tables separate for each center. Descriptive analysis was used for this study.

1. **Results of Evaluation:**

The following are the results of the field evaluation.

**Infrastructure (Form-1)**

Site and External Design (Table 1-1)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharqia | Cairo | Menofia | | Port Said | Matrouh | Total |
| El-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Hospital  Central | Helwan Center | Berket El-sabea General Hospital. | Janzur Center | Port Said Center | Matrouh General Hospital |
| Accessibility of the place | \* | \* | \* | - | \* | \* | \* | - | \* | \* | 80% |
| Suitability of surrounding environment | \* | \* | \* | - | \* | \* | \* | \* | \* | \* | 90% |
| Availability of informational signs outside the center | - | \* | - | - | - | - | - | - | - | - | 10% |
| The availability of parking places | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Center / Department site | 2nd | 2nd | Third | Independent | Third | Independent | Third | Independent | Independent | Elevated Ground floor | Independent: 40%  Ground floor: 10%  First-III: 50% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown that most geriatric centers and departments are within a suitable environment and are accessible and have parking areas. However, there are no informational signs outside the centers/department except one (Ismailia).

Primary Care Services and Out-patient Clinics (Table 1-2)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharqia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Hospital General Matrouh |
| Reception office | - | - | - | \* | - | \* | - | \* | \* | - | 40% |
| Elevators | \* | \* | - | - | \* | \* | \* | - | \* | \* | 70% |
| Geriatric Clinics | - | - | - | - | - | - | - | - | - | - | No |
| Suitable area of waiting space | \* | \* | \* | \* | - | \* | \* | \* | \* | \* | 90% |
| Enough seats in waiting space | \* | \* | \* | \* | - | \* | \* | \* | \* | \* | 90% |
| Bathroom exist | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Bathroom equipped for elderly | - | - | - | - | - | - | - | - | - | - | No |
| Cafeteria | \* | \* | \* | - | \* | - | \* | - | - | \* | 60% |
| Corridors suitable width | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The availability of supportive side in the aisles | - | - | - | - | - | - | - | \* | \* | - | 20% |
| Presence of slopes next to stairs | - | \* | - | - | - | \* | \* | \* | - | \* | 50% |
| Presence of space suitable for assistive devices | - | \* | - | \* | - | \* | - | - | - | - | 30% |
| Wall paint colors contrast | - | - | - | - | - | - | - | - | - | - | No |
| Proper Lighting | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Good ventilation | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown the unavailability of specialized clinics for elderly in all centers/departments. The availability of special equipment for elderly ranges between 20 – 50 % in centers/departments.

Out-patient Clinics (Table 1-3):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Emergency exit | - | \* | \* | - | - | \* | \* | \* | - | \* | 60% |
| Fire extinguishers | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Appropriate examination room space | - | \* | - | \* | - | \* | - | \* | \* | - | 50% |
| Examination rooms well equipped for the elderly | - | - | - | - | - | \* | - | \* | \* | - | 30% |
| Non-slippery floors | \* | \* | \* | - | - | \* | - | - | \* | \* | 60% |
| Contrast color on walls and floors | \* | - | - | - | - | \* | \* | - | - | - | 30% |
| Informational signs | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown that general safety measures are available in most centers/departments. There is an emergency exit in the out-patient clinics in 60 % of the centers/departments. The availability of special equipment for elderly ranges between 30 – 60 % in centers/department

Wards (Table 1-4):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Suitable room space | \* | \* | \* | \* | - | \* | \* | \* | \* | \* | 90% |
| Equipments available | - | - | - | - | - | \* | - | - | - | - | 10% |
| Equipment need to be adjusted | \* | \* | \* | \* | \* | - | \* | \* | \* | \* | 90% |
| Number of beds | 12 | 9 | 11 | 37 | 5 | 26 | 8 | 28 | >35 | 4 |  |
| Suitable corridor width | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The availability of supportive side in the aisles | \* | \* | \* | \* | - | - | - | \* | \* | - | 60% |
| Bathroom wide, equipped for elderly | - | - | - | - | - | - | - | - | - | - | No |
| Aids need to be adjusted | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Wall paint colors contrast | - | - | - | - | - | - | - | - | - | - | No |
| Appropriate lighting | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Good ventilation | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Emergency exit | \* | \* | - | - | - | \* | - | \* | - | - | 40% |
| Fire extinguishers | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Availability of examination rooms | \* | - | - | \* | - | \* | - | \* | \* | \* | 60% |
| Non-slippery floors | \* | \* | \* | \* | - | \* | - | \* | \* | \* | 80% |
| Contrast color on walls, floors | - | - | - | \* | - | \* | \* | - | - | \* | 40% |
| Informational signs | - | - | - | \* | - | \* | - | \* | \* | - | 40% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown that room space, ventilation, lighting and quality of floors was suitable in all centers/dept. (100%-100%-80%). Special equipment for elderly was available at on center only (Helwan). Ninety percent of centers/dept. is in need of adjustments. An emergency exit is available in 40% center/dept. Bathrooms in all wards are not suitable for the elderly in terms of space, equipment and aids need to be adjusted in all centers/dept.

**Staff and Human Resources Team (Form 2)**

Head of Team (Center/ Dept.) Manager (Table 2-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Medical specialty | Internal medicine | Internal medicine | Internal medicine | Radio-diagnosis | - | General Surgery | Opthalmology | OBGYN  Training in geriatrics | Internal medicine | Internal medicine |  |
| Management Specialization |  |  |  | Hospital management |  | Hospital management |  |  |  |  |  |
| Years of experience in management | 10 years | 10 years |  |  |  |  |  |  |  | 10 years |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

50 % of centers/dept. managers are internists, only Janzur Center’s manager has received geriatrics training. 20% of managers are specialized in hospital management and 30 % have an experience of 10 years in management (without formal certification).

In Hehia Central Hospital, The internal Medicine department is responsible for geriatric patients and before that it was the responsibility of rehabilitation therapist.

Key members of the team (Table 2-2):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Notes |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Physician | 21 | 2 | 2 | 6 | 5 | 12 | 6 | 9 | 3 | 2 |  |
| Nursing | 4 | 2 | 5 | 14 | 5 | 20 | 42 | 21 | 10 | 4 |  |
| Social Worker | 1 | 6 | 1 | 1 | 1 | 3 | 4 | - | 2 | 4 | 90% |
| Pharmacist | 1 | 1 | 1 | 3 | 1 | 2 | 1 | 15 | 10 | 1 |  |
| Psychologist | - | - | 1 | - | - | - | 1 | - | 1 | - | 30% |
| Verbal and cognitive Rehabilitation | - | 1 | 1 | - |  | - | - | - | - | - | 20% |
| Physical rehabilitation | - | Hospital | 1 | - | \* | 13 | 35 | 9 | - |  | 60% |
| Nutrition Specialist | 1 | Hospital | - | 1 |  | 3 | 3 | 1 | - | - | 50% |
| Occupational therapist | - | - | - | - | - | - | - | - | - | - |  |
| Other cadres |  | Hospital |  | 6 |  | 40+ | 2 | 30+ | 10 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

1 Al-eman General Hospital has a geriatric specialist and a physician enrolled for a geriatric diploma.

2 The 4 nurses working at Berket El-sabea Central Hospital are the actual ones working there. There are 5 others who are distributed across the hospital services. There are 35 physiotherapists who are registered under the physical medicine dept. The geriatric dept. has been closed for over a year.

**Provided Services (Form-3)**

Form of Provided Services (Table 3-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Provide comprehensive geriatric assessment service | - | - | - | - | - | - | - | - | - | - | No |
| Provide health education service | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Provide special rehabilitation services for the elderly | - | - | - | \* | - | \* | - | - | - | - | 20% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results show that all centers/ dept. do not currently provide comprehensive geriatric assessment. Both Helwan and Suez centers provide special rehabilitation services for the elderly. Some centers/dept. provide health education services orally rather than on a regular systematized basis.

Preventive Services (Table 3-2):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Flu vaccination | \* | \* | - | - | - | - | - | - | - | \* | 30% irregularly |
| Pneumonia vaccination | - | - | - | - | - | - | - | - | - | - | No |
| Tetanus vaccination | \* | \* | - | - | - | - | - | - | - | \* | 30% irregularly |
| Availability of preventive medications (aspirin-Calcium- vitamin D. Omega-3 and other vitamins) | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Provide education to modify lifestyle  (nutrition- smoking-exercise) | - | - | - | - | - | - | \* | - | - | - | No |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown that all centers/depts. provide preventive medications, however no regular vaccinations specific to elderly are provided.

The life-style modification health education (smoking, nutrition and exercise) are provided at hospitals. As for elderly it is provided orally and non-systematically. There is a health education forms at Bereket El-sabea Hospital.

Early Detection of Common Diseases and Tumors in the Elderly (Table 3-3):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Measuring Osteoporosis | - | \* | - | - | \* | - | - | - | - | - | 20% |
| Basic laboratory tests  (Blood sugar, Lipids, kidney function, liver function, hemoglobin, urine analysis) | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Pelvi-abdominal ultrasound | \* | \* | \* | - | \* | - | \* | \* | - | \* | 70% |
| Audiometry | - | \* | \* | - | \* | - | - | - | - | - | 30% |
| Visual examination and eye pressure measurement | \* | \* | \* | - | \* | - | \* | - | - | \* | 60% |
| Ability to provide tests for mental status | \* | - | - | - | - | \* | - | - | - | - | 20% |
| Ability to provide tests for depression | - | - | - | - | - | \* | - | - | - | - | 10% |
| Assessing risk of falling | \* | - | - | - | - | - | \* | - | - | - | 20% |
| Mammogram | - | - | - | - | - | - | - | - | - | - | No |
| Pap smear | - | \* | \* | - | - | - | \* | - | - | - | 30% |
| Colonoscopy | \* | \* | \* | - | - | - | - | - | - | - | 30% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Results have shown that all basic laboratory testing are available at all centers/depts.-however specific elderly investigations are not available in most centers/departments

Quality of Service and Continuity (Table 3-4)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Availability of a mechanism to deal with emergencies | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Availability of a mechanism for referral to other levels of care | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The availability of a list of community services available for the elderly | \* | \* | - | \* | \* | - | \* | - | \* | - | 60% |
| The availability of follow up for geriatric syndromes | - | - | - | - | - | - | - | - | - | - | No |
| The availability of follow up for common geriatric diseases | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Availability of different drugs | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The possibility of coordination with other service providers | \* | - | - | \* | \* | \* | - | \* | \* | - | 60% |
| Availability of a data base | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Availability of infection control measures | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The possibility of measuring patient satisfaction | \* | \* | \* | - | \* | \* | \* | - | - | \* | 50% |
|  |  |  |  |  |  |  |  |  |  |  |  |

The results have shown the existence of a mechanism to deal with emergency situations, a mechanism for referral and follow-up of common diseases in the elderly, the availability of different medications, infection control procedures and a data base in all centers/depts., according to the protocols of the Ministry of Health. However, there is no mechanism to follow up clinical syndromes for the elderly in all centers/depts. There is an available list of community services in 60% of centers/ depts..

**Service Awareness (Form 4)**

Service Awareness (table 4-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Port Said | Menofia | | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Advertised within the institution | - | - | - | - | - | \* | \* | - | - | \* | 50% |
| Includes details of the services provided | \* | \* | \* | - | - | \* | \* | \* | \* | \* | Available in Clinics 80% |
| Includes procedures | \* | - | - | - | - | \* | - | - | - | - | \* Available 30% |
| Includes health education messages | \* | \* | \* | - | - | \* | \* | \* | - | - | \* Available 80% |
| The availability of advertising media | - | - | - | - | - | \* | \* | - | - | - | 30% |
| Responsible for the awareness of the service | - | - | - | - | - | - | - | - | - | - | Not available |
| There is a special item on the budget for the awareness of the services for elderly | - | - | - | - | - | - | - | - | - | - | Not available |
|  |  |  |  |  |  |  |  |  |  |  |  |

Awareness of the services is advertised in 50 % of centers/depts. and it needs adjustments in Bulaq and Assuit centers. It does not include details of the services provided in 70 % of centers/ depts. Health education messages are provided in 80 % of centers/depts. In 30 % of centers/depts. printed advertisements (Port Said, Helwan, Ismailia) are provided and in 10 % advertisement booklets are available (Helwan). There are no designated employees for awareness of the service and it is the responsibility of the receptionist. There is no special item on the budget for awareness of the services.

**Progress during Patient Visit (Form 5)**

First Visit (Table 5-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Port Said | Menofia | | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Waiting time | \* | \* | - | \* | - | \* | \* | \* | \* | - | Appropriate 70% |
| The time period for the first visit | - | - | - | - | - | - | - | - | - | - | Not applicable 3 |
| Session with the caregiver | \* | \* | - | \* | - | - | \* | \* | - | \* | 60% often |
| Participation of the rest of the team in the evaluation | - | - | - | - | - | \* | - | - | - | - | 10% |
| Appropriate development of the problem list |  | \* |  |  |  | \* |  |  |  |  | Appropriate 20% |
| Mode of development of geriatric treatment plan and follow up | - | - | - | - | - | - | - | - | - | - | Inappropriate 100% |
| Session includes health education for the patient | - | - | - | - | - | - | - | - | - | - | Verbal non-systematic  100% |
|  |  |  |  |  |  |  |  |  |  |  |  |

A comprehensive geriatric assessment mechanism is not used in all centers / depts.Treatment plans and follow-up is unsuitable for the elderly in all centers./depts. The order of the problem list in terms of the importance is followed in the Ismailia and Helwan centers only.In 60% of the centers / departments there is communication with caregivers but is mostly irregular and non-systematic.

3 The time for the first visit is insufficient in most centers due to absence of comprehensive geriatric assessment.

Investigations Required After the First Visit (Table 5-2):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Port Said | Menofia | | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Appropriate Procedures for the investigations within the center | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* 100% suitable |
| Priority tests for the elderly | - | - | - | - | - | - | - | - | - | - | 100%  Absent |
|  |  |  |  |  |  |  |  |  |  |  |  |

Investigations procedures within the centers have a clear mechanism of payment and specific areas for tests, but there is no priority for the elderly in timing of tests (either immediately or by booking appointments).

Follow up Visit (Table 5-3):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Port Said | Menofia | | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Time span of visit | \* | - | - | \* | - | \* | \* | \* | \* | \* | \* Sufficient 70%  Not sufficient  30% |
| Succession of Visits | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | To disburse medications 100% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Follow-up visits are subject to individual variation according to the views of physicians and patient’s response, but 100% of the successive visits are to disburse medications.

**Medical expenses (Form 6)**

Medical Expenses:

Approved price lists follow specific regulations of the Ministry of Health hospitals and the under-privileged are offered free treatment or treatment at the expense of the state or health insurance.

**System of Internal and External Referrals (Form 7)**

Internal Referral (applied to geriatric depts. within hospitals and not applied to centers) (Table 7-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| There is a custom form for internal referrals that includes (name-diagnosis-reason for referral and response) | \* | \* | \* | Not applicable | - | Not applicable | \* | Not applicable | Not applicable | \* | 83.3% |
|  |  |  |  |  |  |  |  |  |  |  |  |

External Referrals (Table 7-2):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| There is a mechanism for external referral | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| The presence of a specific list for places of referral | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
|  |  |  |  |  |  |  |  |  |  |  |  |

**Booking Medical Appointments and Follow up in Out-patients Clinics (Form 8)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Port Said | Menofia | | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Official for Booking medical appointments | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Recording visit dates in each of the Center's records and patient card | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Fulfillment of visits card | - | - | - | - | - | - | - | - | - | - | Unfulfilled [[4]](file:///C:\\Users\\Shenawy\\Desktop\\hi.docx" \l "_ftn4) |
| Reminders and reinforcements | - | - | - | - | - | - | - | - | - | - | Unavailable |
| Advanced booking appointments | - | - | - | - | - | - | - | - | - | - | Unavailable |
| Evening as well as morning appointments | \* | \* | - | - | - | - | - | - | - | - | 20% |
| Instructions in writing for following visit | \* | \* | \* | \* | - | \* | \* | \* | \* | \* | Partially Verbal 90% |
| Regular follow-up system, and is linked to the disbursement of medication | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Dealing with patients who have failed to attend | - | - | - | - | - | - | - | - | - | - | Unavailable 100% |
| Identifying personnel by name tags | - | \* | \* | \* | \* | - | \* | \* | \* | \* | Partially conforming 80% |
| The presence of a responsible official for the coordination of services within the center | \* | \* | \* | \* | - | \* | - | \* | - | \* | Available 70% |
| The presence of a responsible official for the coordination of internal and external referrals | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | Available 80% |
|  |  |  |  |  |  |  |  |  |  |  |  |

4 Visit card lacks patient assessment data and problem list and is in needs re-designing.

The staff members are responsible for booking appointments in 90 % of centers/depts. Appointments are recorded in hospital archives and in patient cards in 100% of centers/depts. There are no advanced booking options or reinforcements in 100 % of centers/depts. There are evening appointments in 20 % of centers/depts. and in 100% of centers/depts. follow up visits are for medication disbursement. There is no mechanism to deal with patients who have failed to attend in all centers/depts. Only 20 % of centers/depts. identify staff members. There are officials designated for coordination of services within centers/depts. in 80 % of cases. There is also an official responsible for external referrals in 100 % of centers/depts.

**Average Number of Elderly Patients Visiting the Center/Department in Previous Three Months (Form 9)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Outpatient clinics |  |  |  | 1054 |  | 2561 |  | 3935 | 4584 |  | 100% |
| Wards and their occupancy rate |  |  |  | 20(Occupancy rate 60%) |  | 23(Occupancy rate 100%) |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

**Social Support (Form 10)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| The presence of a social worker | \* | \* | \* | \* | \* | \* | \* | - | \* | \* | 90% |
| Provide service for treatment at the expense of the state | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Provide social research to government bodies | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Interpersonal communication with NGOs | \* | \* | \* | \* | \* | \* | \* | \* | \* | - | 90% |
| Documented examples of social activities | \* | \* | - | \* | \* | \* | \* | - | \* | - | 70% |
|  |  |  |  |  |  |  |  |  |  |  |  |

The results have shown that all geriatric centers/depts. have social support - with a note that the activities are suspended at present, due to lack of patients in the wards with the exception of central Helwan and Suez.

**Medical Education (Form 11)**

Most documented continuing education activities do not include the specialty of geriatrics and are not carried out in a systematic and periodic fashion nor done in accordance with a plan for this purpose. All centers/depts. are subject to policy for Continuing Medical Education of the Ministry of Health.

**Medical Records (Form 12)**

The entire necessary infrastructure for the registration of medical documentation is available in all centers/depts. (computers - paper records - trained staff).

There is a paper medical registry for in-patients at Helwan and Suez centers. As to the rest of centers/depts., there are no geriatric wards. .

As for out-patients, all centers/depts. have a paper medical registry but it lacks comprehensive geriatric assessment data.

**Ethics and Legislation in the Care of the Elderly (Form 13)**

Concerning the ethics and legislature in the care of elderly form, there are shortcomings in all centers/depts., which can be listed as follows:

* The concept of the legislative rights of the elderly was unclear for workers in the centers/depts. albeit they were aware of the patient's rights and duties at the center/depts.
* Justice in practice is applied towards the elderly in all centers/depts. in the framework of usual medical practice which is individual with in each specialty and in need of further awareness.
* There is a lack of awareness among all workers of all the centers of how to determine the competency of patients and how to deal with guardianship cases.
* There is no standard definition of “Elderly” and the services provided for them.
* The mechanism for reporting medical malpractice is through complaint offices and patient satisfaction questionnaires or through direct complaint to the manager, his designees or the social worker.
* There are no protocols for dealing with cases of caregiver neglect and abandonment after completing therapy at the centers/depts.

**Evaluation of Practice and Provided Services for the Elderly by Staff Members (Form 14)**

Difficulties: lack of team members (Table 14-1):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Shortage of geriatric specialists | - | \* | \* | \* | \* | \* | \* | \* | \* | \* | 90% |
| Lack of other disciplines (residents-psychologists-Nutritionists) |  |  | \* |  | \* | \* | \* | \* | \* | \* | 70% |
| Shortage of nursing | \* | \* |  | \* |  |  |  |  | \* | \* | 50% |
| Lack of entertainment for patients |  | \* | \* |  |  |  | \* | \* | \* |  | 50% |
| Labor shortage | \* |  |  |  |  | \* |  |  | \* | \* | 40% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Difficulties have been arranged according to their recurrence in different centers/depts. not importance. The questionnaire used was an open ended one and thus some problems may have been over sighted by workers. The results also show that was a lack of geriatric specialists in 90% of centers/depts. and a shortage in other specialties was reported in 70% of centers/depts.

Difficulties: Shortage of Regulations and Services (Table 14-2):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Lack of clear protocols for admission of the elderly | \* |  | \* | \* | \* |  |  | \* |  | \* | 60% |
| Lack of clear protocols for discharge of the elderly | \* |  | \* | \* | \* | \* |  | \* |  |  | 60% |
| Shortage of services |  | Some investigations |  | Domestic services  Vaccinations | Economic treatment | Domestic services  Alzheimer protocols |  |  | Domestic and social services  Economic treatment |  | 50% |
| Poor nutrition list |  |  |  | \* |  | \* |  |  |  |  | 20% |
| Weak financial incentive |  |  |  |  |  |  | \* | \* |  |  | 20% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Difficulties: Shortage of Equipment (Table 14-3):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Shortage of some equipment  (Generator-gas network- waste room- physiotherapy devices) |  |  |  | Physical therapy devices |  | Gas network and waste room | Physio- therapy devices | Physiotherapy equipment and generator |  |  |  |
| Shortage of medications for elderly |  | \* |  |  |  |  | \* | \* |  |  | 30% |
| Shortage of aids |  | \* |  |  |  |  | \* |  |  |  | 20% |
| The lack of elevators |  |  | \* |  |  |  |  | \* |  |  | 20% |
| Lack of disposables |  |  |  | \* |  |  |  |  |  |  | 10% |
| Lack of space |  |  |  |  |  | \* |  |  |  |  | 10% |
| Lack of storage areas |  |  |  |  |  | \* |  |  |  |  | 10% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Suggestions (Table 14-4):

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Assiut | Ismailia | Giza | Suez | Al-sharkia | Cairo | Menofia | | Port Said | Matrouh | Total |
| Al-eman General Hospital | Ismailia General Hospital | Bulaq El-dakrour General Hospital | Suez Center | Hehia Central Hospital | Helwan Center | Berket El-sabea General Hospital | Janzur Center | Port Said Center | Matrouh General Hospital |
| Specialized training courses for employees |  | \* | \* | \* | \* | \* | \* | \* | \* | \* | 100% |
| Provision of residents | \* |  | \* | \* | \* | \* | \* |  |  | \* | 70% |
| Material incentive for workers |  |  | \* | \* | \* |  |  |  | \* | \* | 50% |
| Develop a mechanism for the discharge of patients |  | \* | \* | \* |  | \* |  | \* |  |  |
| Clearly define the goals of the service |  |  |  | \* |  |  |  | \* | \* | \* | 40% |
| Seminars to educate patients and caregivers | \* |  |  |  |  | \* |  |  |  | \* | 30% |
| Provision of workers |  | \* | \* |  |  |  |  |  | \* |  |
| Defining the characteristics of targeted patients |  | \* |  | \* |  |  |  |  |  |  | 20% |
| Supplying equipment |  |  | \* |  | \* |  |  |  |  |  | 20% |
| The provision of facilities for the patient |  |  | \* |  |  |  | \* |  |  |  | 20% |
| Expansion |  |  | \* |  |  | \* |  |  |  |  | 20% |
| Automating records |  |  |  | \* |  | \* |  |  |  |  | 20% |
| Activation of staff satisfaction survey |  |  |  |  |  |  |  |  |  | \* | 10% |
|  |  |  |  |  |  |  |  |  |  |  |  |

Suggestions have been arranged according to their recurrence in different centers/depts. not importance. The questionnaire used was an open ended one and thus some problems may have been over sighted by workers. The most frequent suggestion was the need for specialized training in geriatric care for all staff members.

1. **Analysis:**

The study was conducted on all ten of the Ministry of Health geriatric care centers in nine different governorates, including four independent centers and six departments within hospitals. The purpose of the visits were to assess the current situation of the centers individually and in general through several axes, which highlight the condition of the facility and the services provided and the human resources, all within the framework of the scientific basis for health care services for the elderly.

The study included the environment surrounding each center and how easily accessible it is and the availability of parking spaces outside the center which is of utmost importance to the elderly and their caregivers who accompany them on their visits. This was done through visits and direct observation. Around 80% of the centers were easily accessible and 90 % of centers had a suitable environment however, informational signs were available in only 10 % of centers but could be reached with the help of locals. Parking areas were available in 100 % of centers. The previous items are of utmost importance to guarantee comfortable and hardship free service. The required adjustments can be easily done in cooperation with concerned authorities and they are mostly in the form of paving the streets and adding informational signs starting from the closest main street which will ensure both easy accessibility and partial advertisement of the center. It is also to be considered that suitability of the surrounding environment and easy accessibility may ensure regular follow up. The field visits which included all centers and departments and all their sections revealed that the compatibility of the outpatient clinics with geriatric standards ranged between 0 % in some of the items and 100 % in other items as shown in table (1-2). It is worth mentioning that there some of the items had a 0% fulfillment in spite of their importance, such as the existence of specialized clinics for the elderly, although the medical specialty exists in the Ministry of Health, but the trained and qualified personnel is not sufficient for the development of the clinic.

Lack of bathrooms equipped for the elderly are among the items that were unfulfilled. This may negatively affect the status of the elderly who visit the facility and raises the risk of falling. It is also difficult for disabled elderly to use these bathrooms in their current condition..

On the other hand, there are items that were well fulfilled, such as spacious waiting areas and corridors and appropriate lighting, This demonstrates that the infrastructure of the out-patient clinics are in need of minor modifications to fit elderly patients visiting the facility.

As for the wards, the percentage of fulfillment of criteria ranges between 0 % to 100 %. It was observed that there is a lack of well-equipped bathrooms which is of ultimate importance to the elderly patient who suffers functional impairments and needs assistance with activities of daily living which in turn is vital for patient safety and satisfaction. It was also noticed that the fulfillment percentage for equipment was low (10 %) which notwithstanding can be easily overcome by the identification of the proper classification of each center and the development of regulations for it and the preparation of a list of necessary equipment and it’s provision.

Despite the availability of beds in the wards of all the centers, yet the in-patient wards are still not working albeit in two centers in Helwan and Suez. It is certain that the operation of the in-patient wards will have a clear impact on health services for the elderly in different governorates. Although the fulfillment of the required specifications for wards was mostly more than 50% with the exception of paint colors and the existence of an emergency exit, solutions can be considered as to how to overcome these drawbacks.

From the above, we conclude that all ten centers need adjustment to their infrastructure to achieve ideal provision of service for elderly visiting the centers.

As for human resources, it turned out that among centers’ managers of different specialties, only 20% received training in geriatric medicine and 20 % have a certification in hospital management. Among physicians working at the centers, there is only one physician specialized in geriatric medicine working in one only one department. There is a clear disparity in the numbers of the rest of the team members (table 2-2) which sheds light on the necessity of provision of cadres who are qualified in geriatric medicine. And until they are provided, it is a must to train the team members in geriatric care as well as to reconsider the existing number of team members to cover the shortfall in some centers and increase the number of available specializations in others.

The assessment of services found a lack of obligation to implement the comprehensive geriatric assessment despite being an irreplaceable tool in providing medical service for the elderly, owing to the fact that the elderly have particular health issues and atypical presentation which may be confused with physiological changes occurring with age. In addition, the providors of servive fail to create a precise problem list for the patients. The provision of health education for the elderly and their caregivers is an important part of the treatment plan, yet it is done on a non-systematized and non-standardized basis and not in accordance with principals of geriatric medicine. Both previous items shed light on the importance of training the cadres that work in the field of geriatric medicine until more qualified cadres can be provided.

Despite the importance of the existence of specialized rehabilitation services for the elderly, these services are provided in only 20% of the centers, which sheds light on the importance of implementing the service especially with the availability of equipment in in some of the centers and the availability of physical medicine departments in hospitals which This emphasizes the need for training and development of action protocols within the various centers.

Measures for maintaining health have been presented in tables (3-2, 3-3). Results have shown that this service is either provided in small percentage and in a non-systematized fashion or not provided at all with the exception, preventive medications and laboratory investigations. It is worth noting that drug disbursement and laboratory investigation are ordered in a non-systematized fashion and not for the purpose of primary care which emphasizes the importance of training which in turn could have a major effect in promoting quality of life for the elderly and on the long run could introduce the concept of “Healthy Aging” . The provision of this service is simple and only needs a plan for execution.

Results have shown that there is a clear and codified mechanism for dealing with emergency cases in all centers and that the mechanism for referrals to other levels of care is 100 % fulfilled. Unfortunately, not all levels of care for the elderly (skilled nursing facilities, long term care, day care…..etc.) are available in Egypt or meet the standards.

As regards follow-up, results have shown that follow-up of common diseases is 100 % fulfilled, but that follow-up of geriatric syndromes is unavailable. This emphasizes the importance of comprehensive geriatric assessment which may be ideal for fulfillment of this item especially that elderly usually suffer from multiple comorbidities. It is very encouraging that all centers meet the standards for infection control by 100 % which is vital for geriatric care facilities.

Concerning databases, in spite their 100 % existence, yet the items of geriatric health care are non-satisfactory. It could be proposed to develop a comprehensive program that includes all the data required for the elderly to be generalized in all centers.

Table (4-1) shows means of generating awareness of the service provided, which is an important item owing to the fact that geriatric services in Egyptian society are relatively new and there are many misconceptions concerning the standing of geriatric facilities. It is thus vital that decision makers consider awareness of geriatric services as a priority, and to assign a special budget for this task.

The booking at all centers/ departments is done in a very simplified manner through making direct reservations (tickets). This can be developed by establishing a mechanism by which appointments are made and a certain time is designated to each patient to reduce waiting time. Additionally, using a standard patient card that is generalized in all centers could provide a more appropriate service

After carefully observing patient visits in all centers, it was noted that the time period for the first visit is not enough to perform a comprehensive geriatric assessment and that health education of the patient and their caregivers is either not done or done in a non-systematized fashion. Further, problem lists; treatment plans and follow up formulations do not meet geriatric standards and does not involve other team members in 90 % of centers. This further emphasizes the importance of training cadres to do comprehensive geriatric assessment and to visualize patient visits and to make a distinction between the first visit and follow-up visits, which will lead to the development of the service and make it easier for both providers and recipients.

As regards the referral system, it was found that the internal referral system is working in departments within hospitals and the external referral is working in all centers and departments in coordination with other hospitals. There are referral forms that are being used and can be modified to suit elderly needs.

After a careful evaluation of medical expense regulations for all centers and departments, it was found that there is a unified code. This may need to be altered in case of a re-allocation of the services provided by some centers to include for example long term care, either by preparation of new regulations or adding items of the new service to the existing regulations.

There is a social worker in 90 % of centers but they are under-trained for social services for the elderly, notwithstanding the social workers importance within the team providing service to the elderly.

Results have also shown that there are some continuing medical education activities, but is non-systematized and lacks geriatric issues.

Medical records are mostly hand-written and need a few additions for comprehensive geriatric assessment.

The ethics and legislation form has been designed for the purpose of emphasis on some of the issues for the elderly, such as dealing with incompetent elderly and cases of violation, but these concepts are not clear with a large number of workers and there is a need for awareness regarding these concepts.

Finally, a sample of workers in the centers were surveyed on the most important problems that they meet (table 10.1) and 90% of them reported the lack of specialized cadres as the most important problems they face and 100% suggested holding training courses for workers.

And from the above it is proposed:

* Evolve a comprehensive development plan for the centers (second phase of the program).
* Evolve a development plan for each individual center according to its unique characteristics and that of the governorate where it is situated.
* Evolve a comprehensive training program for all the staff members in the centers.
* Provision of qualified geriatric cadres.
* Development of workplace regulations in every center that includes a classification of the center and the services provided and the targeted population.
* Adjustment of the infrastructure to suit the provided services.
* Development of medical records.
* Development of a comprehensive program for awareness of the services at the governorate level.

**Conclusion:**

The Ministry of Health of the Arab Republic of Egypt centers and geriatric departments provide a much needed service for a significant and large section of society but they require a plan to improve the level of services provided, which will contribute positively to the advancement of health services for elderly Egyptians and improve the quality of life for the rest of society in general.