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Vulnerable Older Populations without Special Health Care in Egypt: A need for Assessment & Reform / كبار السن الذين يفتقرون إلى الرعاية الصحية المتخصصة في مصر: متطلبات التقييم والإصلاح

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THE PUBLIC POLICY HUB

Vulnerable Older Populations Without Special Health Care in Egypt: A need for Assessment & Reform.

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2019

The opinions expressed in this paper are those of the authors and do not reflect AUC Policies or views. They are published to stimulate further dialogue on issues and challenges facing Egypt in an attempt to expose graduate students to practical policy solutions.

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I. Executive Summary

The older populations and their needs. Do we need a proper definition of when such category of population needs special services and particularly healthcare services. Different guidelines and policies have named them a number of names; Older populations, geriatrics, senior citizens. Are they considered vulnerable at the age of pension which is 60, or does their vulnerability lie at a later age? Or is it when the comorbid diseases strike at an older age? Are they aware of what the government could offer them in terms of services and facilities? How this issue is tackled in Egypt for the Egyptian older citizens? What certain policies are tackled to address their needs? And Are they well addressed?

Undoubtedly, there are a lot of untouched areas in this topic. Nevertheless, the fact is there is a lack of service provision and a lack of awareness towards geriatric care service in Egypt. Older people's care includes medical care, home care, facilities care, etc. Despite recent efforts by the government, there are no tangible changes in the services offered to the elderly population in Egypt.

Urbanization and the change in the Egyptian demographics is exacerbating the problem. Egypt now is becoming a nation of dignified older citizens that need additional care and special attention. A number of policies and reforms have already been discussed but never thoroughly analyzed. Some policies alternatives to this addressed issue are discussed within this paper to hopefully spot the light to tangible solutions. Including 1. A modification of the recent Geriatric Companion Project Launched by the Ministry of Social Solidarity, 2. Preventive measures for increasing the quality of life for the elderly, 3. IT & Artificial Intelligence Solutions, and 4. Raising the capacity and quality of public nursing homes. We further agreed to use such multi decision rule that consists of the time frame it will need to put the policy into action. There is a need to leap more steps in this particular issue, for are there Egyptian people suffering everywhere. On the other hand, there are various issues to be taken into consideration: the efficiency of choice and how much suffering it will lessen or the impact it could have on this segment of Egyptian population, the cost pertained, and political acceptability, how equity is being practiced, along with examining the involved stakeholders, and the proper policy feasibility analysis. Consequently, the need for a rigorous action plan to involve all stake holders with a clear vision and mission is the key for implementation. Finally, the suggestion now is to move forward with the Geriatric Companion Project with a close follow up through a quality parameters audit system for home care centers to make it accessible to older people, an increase of geriatric specialties through the Ministry of Health and launching the Supreme Council of Geriatrics.

II. Problem Statement:

The older population in Egypt needs a special healthcare system to fulfill its needs and expectations. Nowadays, the older people live longer than before due to the improvement of healthcare services. That leads to an increase in the number of older people and creates a pressure on resources especially with the

limited resources in Egypt. According to CAPMAS, Egypt's population in 2018 was 96.2 m, about 3.68 m are +65 year. The percentage of the older people has been increasing in the previous 10 years (CAPMAS, 2018).

After retirement, they turned from a productive person to a person who needs special care from others. It is common now for family members to travel and live in different countries and leave their parents alone. Moreover, the problem of older people is not limited to economic factors as many rich older people could not find well-qualified people or available equipment to support them when they need it. In Egypt, we need to have a social and healthcare policy to take care of them. The government implemented several policies for this purpose, but they need more attention to their problems.

Taking in to consideration, the government has agreed on many international and national agreements for the care of the elderly as will be later analyzed and mentioned, still the impact is not seen and the policies need to be formulated around such agreements' implementations.

Many NPOs are working to support and provide services for older people by providing healthcare services, social services and psychiatric services.

We need to define that Geriatric groups include

- A geriatric living alone by himself/herself
- A geriatric living with family members
- A homeless geriatric
- A geriatric who is not supported by the government – No insurance, no financial support.
- Geriatric with special needs

Our policy paper will focus on geriatrics in general, without a special focus on the homeless, or older people with special needs, because eventually if the situation improves in general, it will automatically include the other segments as well.

As addressed in the recent population pyramid mentioned at index mundi, the percentage of elderly whom are defined as 65 years and over is 4.22% (male 1,993,248/female 2,097,896) (2017 est.) and the category of age 55-64 years constitutes around 5.95% (male 2,861,136/female 2,911,586) of the Egyptian population pyramid. Conclusively, they constitute around 10.17% of the whole population.

Background of the Problem

There is a demographic transition in developing countries, suggesting a change in their age groups towards an increase in the elderly population. Egypt is facing this problem and there have been some concerns and attempts to address the problems facing the elderly population in Egypt (or here – the population pyramid -)

Due to the improvement in healthcare services, there is a longer life expectancy and a decrease fertility rates. Consequently, the percentage of people over 60 years is growing faster than any other age group (WHO EMRO, 2019).

In order to thoroughly look at this problem, we need to analyze how Egypt is dealing with such an issue locally, within the international context, applied laws, and different agreements, while further moving towards the SDGs goals.

Legal Background Assessment:

Regulating the services of the elderly in Egypt depends on International Action Plans, Sustainable Development Strategy 2030 and a national law passed to the parliament recently. In the following sections, an overview is presented of the supporting legal environment as well as the implications of these legal frameworks.

International Action Plans/ Madrid International Action Plan on Ageing (MIPAA, 2002)

In response to the increase in longevity worldwide, the UN released international plans of action on ageing which were proposed to serve as an applied tool to assist decision makers to emphasize on key priority areas related to individual and population aging. The plan also takes into consideration the legal, dignity and economic empowerment rights of the elderly besides medical care. The plan also realizes the societal, demographic and contextual differences between developed and developing countries. Accompanying the increased longevity is a demographic shift which poses a challenge for developed and developing countries. Developing countries are under further stress where resources should be directed to development and to care for the elderly. The elderly population in developing countries lives mainly in the rural areas (Human Development Reports, 2019).

Egypt signed the Political Declaration and International Plan of Action on Ageing Vienna 1991 and Madrid 2002. This plan of action has 3 main priority directions engaging the care for elderly activities into development activities, advancing health and wellbeing of the elderly, and ensuring and enabling supportive environments for the elderly. The declaration also emphasizes that care for the elderly should be integrated into development goals. The action plan displays the different issues under each priority area and the objectives of that issue. Actions are suggested to achieve each objective but are not included in this policy paper. The final section of the action plan discusses issues related to implementation on the national and international levels and the different stakeholders that could be involved. The following section will list the priority areas, issues and objectives related to them (United Nations, 2002).

Priority direction I: Older persons and development

One of the main problems that elderly people might face is the decreased income due to inability to work, pensions, or lack of skills and competency to keep up with the changing work requirements. The international agreement emphasizes this issue while upon further exploring the law, the MOSS programs

and the SDS 2030 this area is less emphasized. In the below solutions address the economic vulnerability of the elderly are adopted from the MIPAA 2002 agreement.

1. Importance of continuous contribution of the elderly in the society and to remove discriminations against them. The article does not limit contribution to economic contribution but additionally to social, political, and cultural contribution as care for the family members and voluntary contribution to community activities to promote multigenerational interaction. The article elaborates on means to create an enabling environment to achieve this objective and participation of the elderly in decision making processes”⁽¹⁾.

2. Importance of creating opportunities for income generation for the elderly. Means to involve the elderly in the workforce would be through macroeconomic and labour policies that support employment for all age groups, promoting self-employment initiatives for elderly, and to take measures to increase participation on working age group in labour markets to avoid dependency later in life among other measures⁽²⁾.

3. Improvement of living conditions and infrastructure and alleviation of marginalization of elderly in rural areas, and integration of older migrants within their new communities are suggested⁽³⁾.

4. Importance of measures to enable the elderly to adjust to technological changes to be taken especially for those in the workforce. The objectives of this article are to ensure equality of opportunity throughout life to access education, training and retraining and placement services, and to utilize the potential of persons of all age recognizing the benefits of increased experience with age⁽⁴⁾.

5. Strengthen solidarity through equity and reciprocity between all generations through developing policies and initiatives on the society level⁽⁵⁾.

6. Importance of reduction of poverty among the elderly in concomitance with other poverty reduction goals and recognizing inter-gender differences where elderly women suffer poverty more than men and the results of workplace discrimination on elderly⁽⁶⁾.

7. Promotion of programmes to enable all workers to acquire basic social protection/social security, including pensions, disability insurance and health benefits and provision of sufficient income for all older persons in particular socially and economically disadvantaged groups⁽⁷⁾.

8. Equal access by older persons to food, shelter and medical care and during natural disasters and other humanitarian emergencies and to enhance the contribution of older persons in reconstruction of communities following emergencies⁽⁸⁾.

1 (“Madrid_plan.Pdf” n.d.)

2 (“Madrid_plan.Pdf” n.d.)

3 (“Madrid_plan.Pdf” n.d.)

4 (“Madrid_plan.Pdf” n.d.)

5 (“Madrid_plan.Pdf” n.d.)

6 (“Madrid_plan.Pdf” n.d.)

7 (“Madrid_plan.Pdf” n.d.)

8 (“Madrid_plan.Pdf” n.d.)

Priority direction II: Advancing health and well-being into old age

1. Prevention of disease and provision of safe and correct treatment to the elderly within three objectives: Reduction of the cumulative effects of factors that increase the risk of disease and consequently potential dependence in older age, Development of policies to prevent ill-health among older persons and Access to food and adequate nutrition for all older persons⁽⁹⁾.
2. Elimination of social and economic inequalities based on age, gender or any other ground to ensure that older persons have universal and equal access to health care, Development and strengthening of primary health-care services, and Continuum of health care to meet the needs of older persons and promote their inclusion in the process and Involvement of older persons in the development and strengthening of primary and long-term care services⁽¹⁰⁾.
3. Provision of adequate information, training in caregiving skills, treatment, medical care and social support to older persons living with HIV/AIDS and their caregivers and Enhancement of the role of older persons as caregivers for children with chronic diseases, including HIV/AIDS, and as surrogate parents⁽¹¹⁾.
4. Provision of improved information and training for health professionals and para-professionals on the needs of older persons⁽¹²⁾.
5. Development of comprehensive mental health-care services ranging from prevention to early intervention, the provision of treatment services and the management of mental health problems in older persons⁽¹³⁾.
6. Maintenance of maximum functional capacity throughout the life course and promotion of the full participation of older persons with disabilities⁽¹⁴⁾.

Priority direction III: Ensuring enabling an supportive environments

1. Promotion of “ageing in place” in the community with due regard to affordable housing options for older persons, improvement in housing and environmental design to promote independent living by taking into account the needs of older persons in particular those with disabilities, and improved availability of accessible and affordable transportation for older persons⁽¹⁵⁾.
2. Provision of a continuum of care and services for older persons from various sources, support for caregivers⁽¹⁶⁾.
3. Elimination of all forms of neglect, abuse and violence of older persons and the creation of support services to address elder abuse⁽¹⁷⁾.
4. Enhancement of public recognition of the authority, wisdom, productivity and other important contributions of older persons⁽¹⁸⁾.

9 (“Madrid_plan.Pdf” n.d.)

10 (“Madrid_plan.Pdf” n.d.)

11 (“Madrid_plan.Pdf” n.d.)

12 (“Madrid_plan.Pdf” n.d.)

13 (“Madrid_plan.Pdf” n.d.)

14 (“Madrid_plan.Pdf” n.d.)

15 (“Madrid_plan.Pdf” n.d.)

16 (“Madrid_plan.Pdf” n.d.)

17 (“Madrid_plan.Pdf” n.d.)

18 (“Madrid_plan.Pdf” n.d.)

The Sustainable Development Strategy Egypt 2030

- Although it is mentioned on the MoSS website that Egypt is taking action to provide services for the elderly in commitment to SDS 2030, there is no specific objective for the elderly. It is broadly mentioned in the Social Dimension as one of the goals of further social inclusion of all society sectors (Hayman,2019).

Egyptian Law on the Care of the Elderly

In 2018, a draft law was passed to the parliament. The law specifies the elderly as Egyptian citizens above 65 years old.

As mentioned previously in the agreement section the term care for elderly encompasses economic, medical and social care and thus separation between these dimensions of need and vulnerability is not possible. . Within this context the law defines the vulnerable elderly as those who cannot provide for themselves partially or completely the basic needs of life due to financial, **physical, mental or psychological disabilities;** combining the medical and social dimensions of vulnerability.

The draft law consists of 24 articles covering the different aspects of care for the elderly which did cover most of the issues specified by the MIPAA 2002, however the items related to inclusion in social development and work force are not explicitly specified In the following section we demonstrate briefly the items covered by the law (draft), this step was essential to start exploring the different policy alternatives on the basis of what is anticipate to be provided or mandated by law.

The elderly has the right to be treated abroad on the expense of the state. Elderly who are not staying at public care homes or those caring for them have the right to a pension. Elderly also have the right to several discounts and fee waiver in public services, healthcare insurance, public transportation, courts, and domestic flights and of customs on prosthesis, equipment and special needs cars. The government should take all possible measures to ensure that elderly fully have their civil and political rights. The government should work on social inclusion of the elderly according to their health and psychological status. The government should commit to establishing, providing and equipping public care homes with specialists in all aspects of care needed by the elderly. The government should support private sector, NGOs, clubs, and public benefit associations in setting up and managing care homes and other activities and assistance to families caring for elderly.

The executive regulation accompanying this law defines the means of private sector support, assistance provided for families caring for elderly, conditions for approvals to establish private elderly homes, conditions and prices of accommodation and care services provided while providing technical and financial support after performance evaluation and monitoring. The government should be committed to establishing areas for the elderly in clubs and youth centers to practice physical, cultural, religious and entertainment activities, according to specifications of the elderly needs and establishing an elderly home in each governorate under the supervision of the Ministry of Social Solidarity.

The government also is committed to preparing offices that provide all services that elderly need to guarantee that they enjoy equal rights with other members of the society. The government is also committed to provide sufficient mobile service centers and daily (morning care) for the elderly. Providing help and preparing specialized medical and technical staff that provide services to the elderly in all hospital and medical centers and to provide medical care and physical therapy to the elderly in their home. The government is committed to providing special parking areas for elderly cars in public service, religious and entertainment areas in addition to special equipment in public transportation (as specified in the executive regulation) and granting them priority to complete their transactions in government organizations. Elderly should not be admitted to care homes against their will and public and private care homes should be under medical and technical supervision of both the Ministry of Social Solidarity and Ministry of Health and Population. Priority is given to elderly without families or that family members cannot care for them in public care homes and providing this service for free for those in financial need. Care for elderly is the responsibility of the children then the grandchildren then the siblings and in cases of dispute the court assigns the designated person for care and the financial responsibilities and the MoSS should provide a pension for the caregiver in case of lack of available funds for caring for the elderly which is signed by the Minister of Social Solidarity. This law does not deprive the elderly of other rights in other laws and the MoSS has the right to change the caregiver according to the recommendations of the supervisor and the supervisor should be notified of any changes in the health status of the elderly or change of accommodation. Caregivers who are assigned to care for the elderly and refrain from their care duty causing harm to the elderly are subject to legal punishment. Additionally those using the ID card or parking places are also subject to legal punishment.

Policy Implications Analysis

The Madrid International Action Plan on Ageing -abbreviated to MIPAA 2002- sets a comprehensive action plan on improving the services provided to the elderly whether in financial or economic empowerment, access to health services and primary care, prevention and control of diseases, training of care givers, education, social inclusion and safe and affordable housing among other objectives. The action plan emphasizes several public approaches to actions and recommends the involvement of several stakeholders as government entities such as the Ministry of Health and Population, the Ministry of Finance, the Ministry of Housing, and the Ministry of Investment and Social Cooperation, civil society, caregivers, medical staff and religious leaders. However, the law related to the elderly care states the **Ministry of Social Solidarity** as the main entity responsible for elderly services with referral to the Ministry of Health and Population in the article related to technical and medical supervision of care homes. The Higher Commission for Elderly Services at the MoSS was created recently, yet it is not apparent how this commission may enforce actions related to other ministries or to public activities.

The second policy implication is that the law (translated from Arabic) identifies some aspects of care to the elderly as the services offices and the elderly care homes. The law identifies one public care home for each governorate which may be insufficient for highly populous governorates. The law does not refer to all the aspects covered by the MIPAA 2002 declaration and Action Plan.

The Sustainable development strategy does not specify objectives or goals for the elderly. There is a difference between the social goals in the Arabic and English versions and the Arabic version was used (Hayman, 2019).

However, The MoSS had planned a screening for the Elderly homes but no data on this study are available (Abowd, 2009).

Literature review on some elderly care situation in Egypt. It is important to re-iterate that care is a comprehensive term and similar to what we found in the international agreement and the draft law medical and social vulnerability and demands were not separated in the articles.

Conducting some interviews with related stakeholders to the matter, gave a broad overview of the really to focus upon matters that need immediately to be taken decisions along with resources allocations.

For instance; An interview was held in the Ministry of Social Solidarity with Mr. Asaad Saber Mohamed: Manager of Family and Childhood. Mr. Asaad Started with talking about the new project of the Geriatric Companion. He mentioned that this will replace the geriatric nursing homes. About 1000 persons applied for the geriatric companion and only 150 were accepted. Those accepted were trained and started their work. Mr. Asaad found this project a good one; however, he projected that it could be better by working on some specific modifications for improving this project and getting better results. The most important point he focused on was the healthcare service provided for the elderly as these companions assigned for the elderly are not well trained medically and there is a shortage in the nurses and doctors for the geriatric specialty. Therefore, he suggested that the modification of this project has to work on the healthcare service which is important for the elderly, and for a better quality of life for them.

Another interview conducted with one of the leaders of Geriatrics medicine in Egypt, and the head of the New Geriatric hospitals in Ainshams University; Dr. Hala Sweed and we discussed a number of related issues. She gave an introduction about their work, their accomplishments, what they have contributed so far, the previous agreements done with MoSS, etc. They are well implementing the geriatric companion and they had several agreements with other private hospitals to support them with the stuff and related experienced personnel. She was also one of the members of the Higher Committee of Geriatrics and Older People at the Ministry of Social Solidarity. However, the cooperation between those different parties was not completed and paused due to some logistical issues. She mentioned that the new geriatric hospital has all the capacities to build a

new staff and even employ them with temporary contracts. During the meeting, there was a mention about a collaboration and an agreement done between the specified hospital and the international medical center and Wadi El Nil hospitals for training geriatric companions, allocating, and supervising them in the conducted related work back in these hospitals. Nevertheless, the agreement does not only specify the geriatric companion, but there was a sort of exchange between the healthcare provider staff; junior- senior physicians, and consultants.

An open discussion for current Ideas and solutions needed to be addressed for older people services provision in Egypt;

- Draft formulation of minimum standard of care parameters for home care centers

Another professor colleague also mentioned that there was a draft for establishing the minimum standard of care (as quality parameters), for those in home care centers. The project was shared and conducted by MoSS itself, and supported by a consultant in the field. However, there was no more information of what has been further done in generalizing or putting this into work by the MoSS, and no collected data could be gathered in such from our side; except we further looked thoroughly at such and presented this as one of the interventions.

- ***The Establishment of Higher Supreme Council for Geriatrics: affiliated to the Prime Minister Office to interlink between all the services provided***

There was also a previous meeting gathering all stakeholders: military officials, NGOs, hospitals, done through the geriatric new hospital during its establishment. There was a consensus to establish the Higher Supreme Council for Geriatrics to cover all those stakeholders (the Ministry of Planning, the Ministry of Finance for proper funds allocation, the civil society, geriatrics representatives, the Ministry of Higher Education for its hospitals, and the Ministry of Health and Population, to be headed by MOSS).

- ***Pension for long-term care.***

Another element for geriatric companion sustainability project and for other services provision for older population; is to have establish an pension fund, to be directed by the MoSS. So, the pension for the long-term care to be subsidized of the wages and put in one pool. This could maintain the affordability of paying the geriatric companion and be used for long-term care when such a population needs it.

- ***Hotline number for older people***

Another suggestion was establishing a hotline for older people that they could use like the hotlines for children and women. There was also a mention of homecare givers (families, relatives) who are not aware how they can deal with their older family members. They need to have a proper education and links to access proper care services and know where to find them.

Another related issues were discussed; where the private hospitals do not usually accept older people for many reasons;

- Fear of relatives not paying the bills and leaving the patients to die in the hospitals.
- This usually will not rank the hospital in the first ranks of survival and increase the mortality rates of the hospitals .Therefore there ought to be a policy governing that similar to the one for receiving citizens in the emergency rooms.
- A lot of waste and used resources for this type of patients. A financial burden on them.
 - We also talked about older people with dementia and Alzheimer who suffer a lot and need a special consideration, and that there is no support system for them till now,though in general the situation is getting better than before.
 - Finally, there was a mention about newly established private companies providing geriatric companions and are also collaborating with the hospital. Examples are Nahtam, and Aman Co. as a paid service provision along with other things.
 - We also came to a consensus that there is a lack of quality parameters in implementing any projects.

Although most of these ideas have been originally communicated in different meetings to the MoSS officials; however, no follow up or known track of assessment has been taken any further.

The suggestion now is to move forward with the geriatric companion as a quality parameters audit system for home care centers to make it accessible to older people, in addition to increasing the geriatric specialties through the Ministry of Health and refer them back to Ain shams geriatric hospital like before and getting the Supreme Council of Geriatrics in action.

Back to literature review and studies conducted in this related area of specialty and its current situation in Egypt. Several authors have attempted to address the problems facing the elderly population in Egypt. But a limited number of articles were found, and the articles attempted to explore the situation in a comprehensive approach rather than focusing either on the problems of the elderly in Egypt or the review of the services provided. This resulted in the lack of a detailed description of the situation in Egypt. However, the results of the literature review are presented below. There are formal assessments for the elderly care homes undergone by the Center for Criminal and Social Research, yet the results of these studies could not be found.

Boggatz and Dassen (2005) reviewed the literature about ageing and elderly care in Egypt in the period from 1980-2004. The results of this review included that ageing is a slowly emerging phenomenon in Egypt. Care dependency for

lower- and middle-class members is becoming a problem due to economic restrictions. There is a shortage of care-providing institutions and geriatric homes and they seem to differ in their quality according to the social status of the residents. Furthermore, there is a need for additional homecare services to reduce care givers' strain on the families. Boggatz and Dassen (2005) further emphasized the scarcity of literature and the lack of precision in many cases.

Another article published on the American Chamber of Commerce Website in 2009 interviewed a consultant in the Ministry of Social Solidarity. They highlighted the discrepancies between the elderly care homes. According to the article, the elderly nursing homes increased in number to reach 145 homes and 200 elderly care organizations. More than half of the elderly nursing homes are located in Cairo with conditions that vary from crowded apartments to palatial suburban structures. The National Center for Social and Criminology Research sought to document the nursing homes in the country to provide a guide for the MoSS to establish the minimum requirements for building codes and employee qualifications. However, this study or similar studies could not be accessed for the purpose of this policy paper (Abowd, 2009).

According to the article and the consultant interviewed, there is a general lack of awareness among the public about the services provided by the government for the elderly. These services included discount cards for travelling and ATM cards for receiving pensions. Another issue that was mentioned is that only 2% of the elderly population benefit from the formal care services in Egypt because of cultural concepts. The article mentions the concept of care-oriented services or services that aid elderly people living on their own or with their families. The article further sheds light on the possible role of the private sector in investing in training care givers or training centers, yet this concept was not discussed in detail apart from noting that there is a lack of capital and motivation. The Sawiris Foundation introduced a project to train 160 young people on providing health care for the elderly in addition to psychological, social and human rights. The project aims at increasing community awareness regarding the role of health care providers for the elderly and their impact on improving their quality of life (Abowd, 2009).

According to Sweed et al.(2016), the problems of the elderly population in Egypt include the high illiteracy rate among females, reaching 82.7%. The elderly population was 6.27% in 2006 and is projected to reach 20.8% in 2050 (world population prospects adopted from Sweed et. al.). Policies for care of the elderly exist. However, the effectiveness of existing policies and the role of national committees need to be evaluated with more involvement of the older people as stakeholders in the implementation of the national policy through all the phases of planning, intervention, and evaluation. The figure below was adopted from Sweed et al, (2016) denoting the various levels of medical services provided to the elderly including the Ministry of Health and Population and Universities. A sample of 10 centers and departments was assessed in 2015 by a group of experts in Geriatrics care and guided by

the World Health Organization. 14 model forms were designed to cover all the aspects of medical service provided at the centers and departments and were presented to key holders including the Ministry of Health and Population, the Ministry of Social Solidarity, and key academic institutions to provide an evidence for policy making for a comprehensive approach to improve the quality of life for the elderly covering also the infrastructure, equipment and human resources needs (Sweed, 2016).

Dr. Doha al Rashedy, lecturer of Geriatrics at Ain Shams University's Faculty of Medicine, notes that 60% of the elderly population are living in poverty conditions. The services provided to the elderly are inadequate in quantity and quality and the functional and psychosocial needs of the elderly might be neglected. There is an isolation in the provision of services which results in lack of efficacy and increased cost. The geriatric medicine specialty was established in the Ministry of Health and Population in 2007, recruiting 87 doctors but the latest survey presented by the Ministry of Health and Ministry of Higher Education enumerates the geriatric physicians affiliated to the Ministry of Health and Population to less than 10 (Rasheedy, 2015). Al Rasheedy further denotes that the NGOs providing services to the elderly are only 106 out of 17000 NGOs because of the low priority of elderly services. The 106 NGOs are mainly located in the urban areas of Cairo and Alexandria.

The figure below shows the private hospitals that provide geriatric services in Cairo governorate (Rasheedy, 2015).

Stakeholders Services Provision Analysis

Ministry of Health:

- 13 two-floor geriatric health care centers offering health care services to the elderly through specialists from different branches, distributed across all governorates.
- Training family physicians to provide geriatric services.
- Clinical diagnostic service to dementia (memory clinic in hospitals, including assessment, counseling and family support) (Rasheedy, 2015).

Public Universities: (Rasheedy,2015)

- Ain Shams University's New Geriatric Hospital: In early 2019, Ain Shams University opened the first specialized hospital for geriatric patients in the Middle East. Previously, Ain Shams University had a Geriatric Unit providing diagnostic, therapeutic, intensive care and outpatient services in addition to educating physicians in the Geriatric specialty with master and doctorate degrees.
- Alexandria University (Faculty of Medicine) set up a program for geriatric nursing in addition to the outpatient and inpatient services.
- Helwan University Center for elderly social and health care, which is a self-financed

unit under the umbrella of Helwan University Center for Community Development. Services include 10 inpatient beds, day care services, and outpatient clinics in addition to long-term care and services for the functional dependent elderly.

- Cairo, Assiut, Suez Canal and Tanta Universities also offer services for the elderly and educational services to professionals.
- Other health care settings include military hospitals, NGOs and the private sector.
- Some of the hospitals with Geriatric services are:
 - Ain Shams University Specialized hospital has a Geriatric outpatient clinic
 - Geriatric Medical Center, Downtown, Cairo
 - Palestine Hospital includes a Geriatric ICU and a long-term care unit
 - American Hospital in Tanta has a geriatrics department
 - Wadi el Nile hospital's Geriatrics Outpatient Clinic
 - Italian Hospital in Cairo has a Geriatrics Department
 - Abdulkader Fahmy hospital Geriatrics Clinic

Training programs for health professionals: (Rasheedy, D. 2015)

- Geriatric and Gerontology Department, Faculty of Medicine, Ain Shams University offers academic degrees: diploma, masters, and doctorate degrees in geriatric medicine connected to a specialized residency program and clinical training course.
- Geriatric physical therapy education available in three physical therapy colleges.
- Geriatric nursing: colleges of nursing provide undergraduate and postgraduate modules and degrees related to geriatrics up to the PhD level.
- The Higher Institute for Public Health Alexandria offers postgraduate degrees at the department of Health in old age/ public health.
- Colleges of Social Services: Helwan and Assiut universities offer postgraduate degrees in geriatric care, and other universities provide undergraduate degrees.
- Short-term training programs for family physicians and nurses were adopted by the Ministry of Health and Population twice in 2001.

Training for Professional Caregivers: (Rasheedy, 2015)

A variety of programs are offered by different governmental and non-governmental organizations. The objectives and target trainees differ according to the program, where some aim at hiring the trainees, others at creating job opportunities, while still others aim at home care givers. Institutes offering these courses include but are not limited to the Geriatrics Department at Ain Shams Uni-

versity, College of Nursing Cairo University, CEC Helwan, Red Crescent and, recently, Sawiris Foundation as will be discussed later.

Services by the MoSS: (Gadallah, 2015; Al Rasheedy and Sweed, 2016)

Gadallah, Sweed and Al rasheedy are professors of community medicine and geriatrics in faculty of Medicine Ainshams University and the authorsThe services provided to the elderly by the Ministry of Social Solidarity were mentioned in the literature. However the numbers varied among the authors. These services are elderly homes, clubs, the Physiotherapy Unit, the Elderly Service Offices Hosting family project, and the Elderly Sitter Program (Rasheedy, D. 2015; Sweed, 2016; Gadallah, 2015).

Services provided by the government to the elderly:

- This includes social security programs for the senior citizens, advance payment of pensions, home delivery of pensions, aids and loans through Nasser Bank and reduced transportation fees. Apart from the reduced transportation fees, the number of beneficiaries or outreach of these services is not clear from the literature.
- The articles also discussed previous TV and radio programs addressing issues related to the elderly: 4 programs; 3 TV and one radio were previously broadcasted discussing health, social, psychological issues related to the elderly. In addition to the previously mentioned programs, al Rasheedy (2015) mentions a radio channel and a weekly newspaper launched in 2001 discussing elderly clubs and geriatric nursing homes with advice to the elderly.
- Gadallah (2015) emphasized the urgent need to develop a better system to utilize the few qualified geriatric specialists in Ministry of Health system. He denotes the lack of sufficient evaluation of the models of care developed outside the Ministry of Health to replicate the projects. Dr. Gadallah enumerates few models of care which could be considered as benchmarks for the provision of care. For instance, the clinical unit in Ain Shams University represents a good model for advanced geriatrics care. The CEC at Helwan University provides a comprehensive model of dementia care with emphasis on effective community role. The CEC activities also include education and research through its annual conferences and active research projects. The Geriatric Center in Nasr City represents a good model for residential care including medical and social aspects. The center has an effective service to train and provide caregivers (Gadallah, 2015).

Healthcare issues for older people in Egypt

The different health issues that elderly people usually suffer from in general and in particular in Egypt should be put into consideration to be aware of their exact needs and to properly assess the different policies and alternatives to be implemented or suggested.

Old people may suffer from multiple diseases that may affect their quality of

life and increase the risk of complications. These diseases could be classified into different groups as the following:

- ***Sensory impairment***

Sensory impairment of vision and hearing. These conditions could lead to physical injuries and social isolation. 1 out of 6 people above 70 suffers from visual impairment and 1 out of 4 suffers from hearing impairment (Thakur et al., 2013). This condition could be managed by using glasses or hearing aids. Nevertheless, it could lead to physical injuries or social problems if it is not identified and treated early.

- ***Mental disorders***

About 15% of older people suffer from mental disorders, according to the WHO. Mental disorders include a wide spectrum of diseases such as depression, dementia, psychosis or suicidal ideation. The prevention and early detection of mental illness are important to control these conditions. Social support from family, friends, and community is a cornerstone of the management plan as well.

- ***Multiple diseases***

Older people could have multiple comorbidities (several chronic diseases together) such as diabetes, hypertension, kidney or liver diseases. These chronic illnesses need a close follow up with a physician and a qualified team to be managed. According to the National Council on Aging, about 80% of older people have 1 chronic illness and 77% have 2 chronic illnesses. Substance abuse, especially analgesic, may accelerate the deterioration of healthcare (Centers for Disease Control and Prevention Healthy Aging at a Glance, 2011).

- ***Substance abuse***

Many older people may have chronic pain due to osteoarthritis (knee pain), back pain or bone pain. They used to take a large amount of analgesic which has a negative impact on the stomach, blood pressure and kidney. Another form of substance abuse may be due to taking medications several times because they forgot that they had taken already them. About 50% of Older people take 5 types of different medications per day (Miech et al., 2015)

- ***Malnutrition***

Older people may suffer from malnutrition and vitamin deficiency. They may prefer to take soft food due to teeth loss or have a difficulty in digestion which may cause malnutrition. That may be one of the contributing factors in other medical conditions such as dementia, depression, bleeding tendency, and bone pain.

- ***GIT disturbance***

Incontinence and constipation may affect the quality of life of older people. They may need special supplies, equipment and need special care to avoid physical and psychological problems. That may be due to the type of food or other

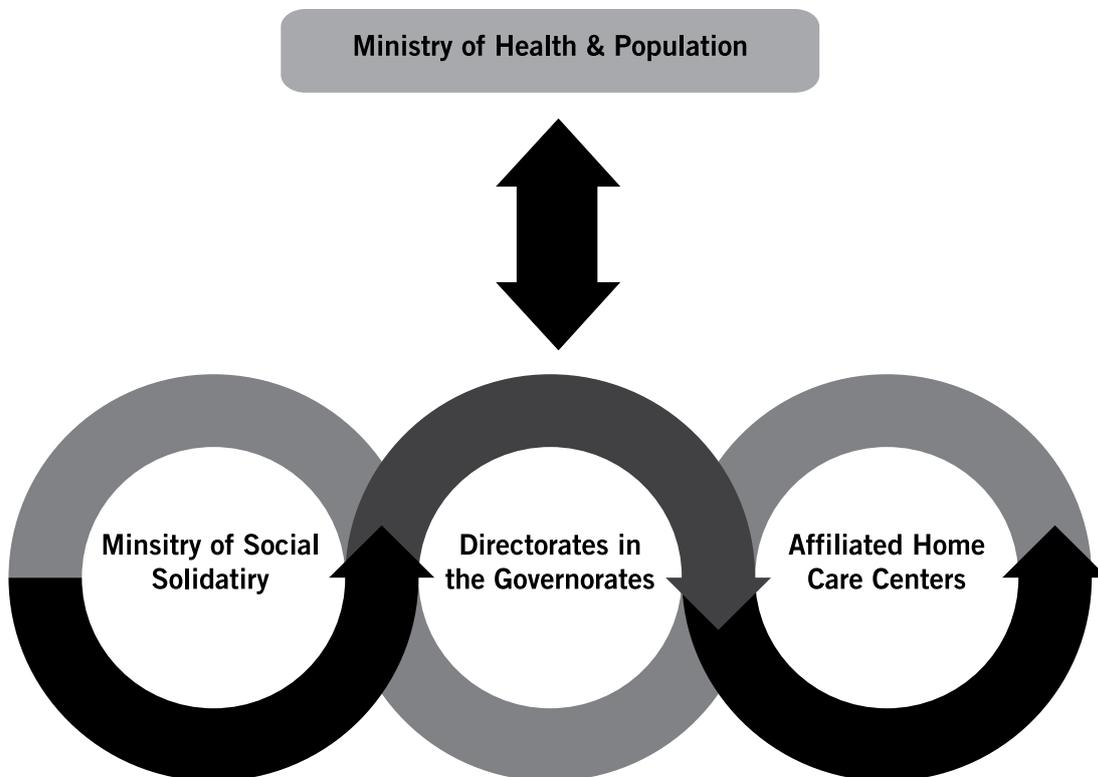
medical conditions. They should not be embarrassed to discuss these conditions with healthcare providers to identify the cause and find the best suitable solution for them based on their socioeconomic status (Baltimore, 2012).

- **Physical injury**

The prevalence of physical injury is high among older people due to muscle weakness or sensory impairment. That could cause bone fraction especially in people with decreased bone density. The fraction may need an operation to be fixed and may lead to other complications such as anesthesia complications, bed ulcer or a decrease in the quality of life (Centers for Medicare and Medicaid Services).

Cross communication inside and among the various stakeholders

Obviously, there had been a noticeable lack of communication between different parties represented or in other words, successful two-way communication. The official linkage to older population care in Egypt; namely MoSS, their supervised different governorates directorates and lastly, the supervised affiliated public homecare centers for the elderly. There had been a noticeable linkage breakage whether in the type of addressed issues, communications, needs assessment plans, or in financial support. It is worth a thorough analysis.



Geriatric specialty is not attractive for physicians for several causes such as

- the clinical outcome is not so good as many patients have multiple diseases in advanced stages
- the financial income for this specialty is not attractive for physicians as other specialties such as ICU, orthopedic, and any specialty with intervention,
- many patients are admitted to ICU units which is overlapping with other specialties. At Ain Shams University Hospital, there are many factors that affect the quality of services provided to older people such as
 - Limited hospital budgets which affect the availability of expensive medication,
 - Family members who leave older people inside the hospital without follow up,
 - Some families may refuse to accept transferring the patient home after the improvement of the clinical condition because they say that the hospital is a good place to take care of him/her. They may claim that there is no available place, the older people still need to stay at the hospital to get a good service. Or they may not accept any calls from the hospital staff. At that time, the hospital may threaten the family that it will report that to the police. Most families prefer to solve this issue at this stage because of their social image inside their community. If the hospital cannot reach any family member, some professors of geriatric medicine use their connections to find a place for these older people. The number of such cases is less than 10 per year.
- The financial income for retired older people is limited. That may affect the availability of the equipment needed to provide a high quality of service, or artificial limbs.
- Most of the medical insurance services cover only some essential medication of diabetes and hypertension but do not cover expensive medication or medication for other diseases of older people.
- There are different kinds of services for older people such as long-term care, palliative care, nursing home, Meals on Wheels, and home care.
 - Palliative care services for terminal-stage malignancy for older people are not available in Egypt. This service aims to decrease pain and improve the quality of death.
 - Nursing homes for older people are very selective. They only accept older people who do not have any mental illness, or patients with clinical conditions that need special care. Nursing homes provide basic needs and someone to sit and take care of older people. There is a limited number of this type of nursing homes in Egypt. They may be NGOs or private. In Egypt, the average cost of accepted service in nursing home cost from 10000 – 15000 EGP per month. The cheapest one costs about 5000 EGP per month. This cost does not include the cost of medication and medical services.

Some NGOs provide nursing home services for free, but this service is not suitable and not at a good quality level. This service depends on volunteers' activities and donations.

-The function of nursing homes in Egypt is to provide meals, help them to go to the bathroom and shower. Patients who need an advanced medical service are not accepted in a nursing home.

-The Meals on Wheels service that aims to deliver a hot meal to older people who live alone is not available in Egypt.

-Home care is provided to older people in their home. A family member may take care of them. A family may hire someone to sit and take care of older people. Some private companies provide this service. There are some issues when hiring someone to sit and help older people such as stealing and neglecting them.

-Another issue when dealing with older people is abuse. The abuse may be active (physical or verbal) or passive (prevent services such as showers or meals).

-Rich families can provide a good service for older people at home by preparing the place to fit the older people. This includes bringing medical equipment (monitors, ventilators, or dialysis) to provide high-quality service inside the home. They keep the nursing service under supervision from another family member.

- Ain Shams university hospital is suffering from a shortage of nurses. That prevents the hospital from working at full capacity and this leads to pressure on the existing nursing staff, which may affect the quality of provided services.

Another interview was conducted with the CEO of Al Gwaherr Non-profit organization that provides services for older people. He said that the NGO has a facility for older people but they cannot accept them to stay at this building because they do not have financial resources to maintain the service throughout the year. Instead, they deliver some dry food, and money for older people at their home by volunteers.

III. Policy Options / Alternatives Analysis:

Policy Alternative 1: A Modification of the recent Geriatric Companion Project launched by the Ministry of Social Solidarity

Mr. Asaad, the Manager of the family and childhood in the Ministry of Social Solidarity, and the one who is responsible for the Geriatric Companion Project, mentioned during an interview that the main problem is the number of caregivers compared with the number of geriatrics in Egypt since every older person has to have a caregiver at home and the population of the elderly in Egypt is now increasing as according to CAPMAS in 2012, the elderly population makes about 7.1% of the total population and is going to be 11.5% in the upcoming years (Kamaly, 2016). In addition, there is a shortage in the number of nurses.

This problem could be overcome by implementing a modified system of the Geriatric Companion. This could be achieved by four points:

1. The first one is to work on improving the skills of these companions by providing them with a medical training and psychological training that helps them offer a better service for the elderly.

As mentioned in From the Editor: Geriatrics in the Middle East, “A health workforce, prepared with the knowledge base and technical skills of geriatrics and gerontology, can respond more effectively and efficiently to the needs that arise from the challenges faced with advancing age. There is no doubt that, through research, education and training, a skilled workforce can help reduce disability and functional limitations, improve the quality of life for both the aged and their family members, and can be an effective means of providing appropriate health care to an aging society”.

This could be achieved by a private public partnership through the Corporate Social Responsibility (CSR) of the pharmaceutical multinational companies in Egypt that will fund the training program in hospitals, for the medical training, and outside the hospitals for other required trainings as the communication skills training and patient counseling: “It is a prime responsibility of nursing to encourage elderly people to optimize their physical, social, and psychological function during changes in their state of health”

(Abyad, 2004). As for education training, “we define CSR as situations where the firm goes beyond compliance and engages in ‘actions that appear to further some social good, beyond the interests of the firm and that which is required by law’” (McWilliams et al., 2006). This training should be with minimal attending hours for the practical and the theoretical part, and at the end of the training, each trainee should receive a certificate after the completion and passing a competence exam. This step is not costly for the government as the multinational pharmaceutical companies will bear the cost of the training. It is a feasible procedure to be easily implemented as the multinational pharmaceutical companies can make a contract with either private or public hospitals for training such groups. In addition, they are very efficient in the training of their employees. Therefore, the quality of the training that will be provided will be an excellent one that can help in the further improvement of this project and the service it offers.

2. The second part is, according to Mr. Asaad during the interview, those trainees feel that they are insecure in this job that they can be replaced at any time. In addition, they do not find a continuous and effective career path that they can continue to work on, develop themselves in, and getting more benefits and increased compensation. Therefore, these trainees could be employed in hospitals covering Cairo and Alexandria as a starting project for a Specialized Geriatric Family Companion, a new job profile as a hospital-based family caregiver support specialist. These specialists will be responsible for different activities and services provided for elderly people and their families. This job title will cover the shortage of nurses at the healthcare sector and will help in ensuring the continuity of the

service provided as these Specialized Geriatric Family Companions will have a career that they will work on, maintain and improve. This step can be achieved by an agreement with the Central Agency of Organization and Administration in order to make contracts with those Companions. This option will not be too costly as those companions will overcome the shortage of nurses. In addition, their salaries could be funded from the revenue of the advertisements of the PHR Mobile Application (to be illustrated in the next point). It is a feasible procedure to be implemented and executed.

3. The third part is that the Ministry of Social Solidarity should launch a mobile application as a Personal Health Record (PHR) that each Elderly in Egypt should have this app on his/ her mobile phone. Personal Health Record is a record of the history of the elderly people's health status that would help in managing their health as the elderly do not have a specific disease or condition that is going to be treated; instead, different chronic diseases that need to be managed. Filling this PHR could be done by those Specialized Geriatric Family Companion that they register all Geriatrics in the surrounding area on this mobile application and entering all the personal health data on this mobile app. Furthermore, training of elderly and family members on the proper use of this mobile app. This will help the elderly in managing their health condition as they suffer mainly from chronic diseases that are not treatable, but managed and are the main causes of worsening of the health condition and mortality: "Today, case management is an essential component of the provision of care to older people, partly because of the fragmentation and discontinuities in the service delivery system, and partly because of the emphasis on cost efficiency and effectiveness" (Abyad, 2004). This application will help in decreasing the number of specialized geriatric companions required as this application will have steps for dealing with the emergency cases and for monitoring chronic diseases. Therefore, the elderly will be able to deal with these conditions without the presence of these companions the whole day.

4. The fourth and final point is that this application will have advertisements from the medical insurance companies, and some pharmaceutical companies that will generate an income that can be used for further funding of the specialized geriatric companion project and the improvement of this project.

Policy Alternative 2: Preventive measures for increasing the quality of life for the elderly

(Preventive Policy Care)

This policy alternative may provide a long-term solution, but it requires a long time and cultural change to be implemented, which may be a challenge.

Disequilibrium, muscle weakness, and atrophy are the main causes of depending on others for going to the bathroom or taking a shower. A sedentary lifestyle, severe illness with a long recovery or any accident that affects the bone and requires fixation may affect the strength of muscle. These factors may convert the older to dependable people who need others to take care of them.

Muscle weakness and atrophy may deteriorate suddenly and get worse by the fall occur to the elderly. The identification and prevention of any factor that may affect muscle strength and equilibrium can increase the quality of life of older people. Keeping older people active and helping them do physical exercise at home are effective measures to prevent them from depending on others.

This alternative is not costly and is easily applicable. There is no need to have special exercise equipment simply active or passive exercise can be sufficient. The crux of the matter is to work on increasing awareness among family members through different channels. The media and family physicians should have a role in increasing awareness of the benefits of physical exercise at home and keeping active. The physician should evaluate muscle power before hospital discharge. The older people may move to a nursing home after a prolonged hospital stay to get physiotherapy and regain muscle strength again. Family members should take care to keep older people active and prevent muscle atrophy during any illness.

Policy Alternative 3: IT & Artificial Intelligence Solutions

IT solutions services are growing nowadays in the all services provision sectors and particularly covering the need for healthcare, where there should be a network coverage system linking such services providers and consumers together.

The Ministry of Social Solidarity could make an agreement with the public libraries for holding training courses for teaching the elderly the basic skills for using tablets and the internet. This option will help in the better execution of the modification of the recent geriatric project especially in the point concerning the usage of the Personal Health Record. This in turn will play an important role in the psychological support of the elderly as they may be easily get in touch with their family and their grandchildren. These training courses could be beneficial also in getting in contact with new friends and building a new community for the elderly and for further psychological support. Moreover, the ministry could work on launching different mobile applications concerned with the health of the elderly like the two examples which are presented as a future transformation in service provision, and a need to cover the needs of such populations, and an introduction to Information Technology and Artificial Intelligence emerging practices: Chefaa and 7keema. These two recent Egyptian start up applications are designed to incorporate needed medical services provision and provide it to the needed consumers. This policy alternative was implemented before in the United Arab Emirates as there are many different applications focusing on the health of the people like the application that was launched by the Ministry of Health there that targets obesity in children, and another application for decreasing the number of citizens having NCDs. This policy option for health mobile applications focusing on the elderly health could be done with a co-operation with the Ministry of Health and Population for a better delivery of service. The ministry could also make an agreement with these different start up applications by offering the elderly special discounts for

using such applications. This policy option is not costly, as the public libraries are everywhere and they have their own working force for delivering such a service. It only requires an advocacy campaign for introducing and starting this alternative. It is a feasible option that can be easily implemented and started directly without any required resources. Such health mobile applications could be launched either by a co-operation between the Ministry of Health and Population and the Ministry of Social Solidarity, or the Ministry of Social Solidarity could make an agreement with different organizations and startups for launching such mobile applications.

Chefaa

Zubair Naeem in his article in Menabytes.com explains that “Egypt’s Chefaa raises six-figure seed for its on-demand medicine delivery platform”; The health-tech Cairo-based startup was founded in 2017 by Dr. Doaa Aref, a PhD in Business Analysis and Dr. Rasha Rady, a PhD in Pediatrics.

Chefaa app makes it possible for patients with chronic diseases to order their medicines and receive them at their doorstep every month. The users have the option to order a month-worth of dosage in a single order and then repeat this order every month. They also receive monthly reminders to reorder the medicine. Chefaa also notifies the users when a certain medicine is running low in the market so the users could consult their doctors for an alternative (Paracha, 2019).

Chefaa primarily gives attention and focus to service provision to patients with chronic diseases, but it can be utilized by anyone having a prescription to order, and that is another way of making an effective use of such technology,. Giving the medicine to those who need it and practicing proper pharmacy practices (Paracha, 2019).

What is pertinent about this moile app to this policy paper is that it is the the first medicine-related platform that can match donations to cases validated by certified NGOs, in which vulnerable older people lacking enough resources could make a use of. Not only that, but also Chefaa also has a CSR (Corporate Social Responsibility) initiative, enabling patients with chronic diseases with low income to also order and receive their medicines (Abdulaal, 2018).

Along with its now expansion plans, Chefaa was launched a little over a year ago and is already operational in nine Egyptian cities and has generated sales of over \$1 million, completing more than 100,000 orders through its network of 800+ pharmacies (Paracha, 2019).

if such a health-tech start is linked to the Ministry of Social Solidarity homecare centers and their older people visitors’ inhabitants, that will truly have an enormous impact on our discussed problem.

Not only that, but the Egyptian founder of the app is planning to be the first medical data warehouse in the region, using Artificial Intelligence technology

to generate data from actual patient prescriptions – since there is a shortage of accurate data on chronic diseases. This alone would have a major impact, not only on research for this type of population and their unmet needs, but also directing the market to fulfill their needs primarily, with solid evidence-based data (Paracha, 2019).

Using such technologies in creating a memorandum of agreement between government officials, different presented stakeholders, and such services provision will not only create a pool for covering the unmet needs of vulnerable older people, but could possibly sustain the provision of services along the way.

7keema

According to 7keema description on Google Play, 7keema is Egypt's 1st on-demand home nursing services app. They provide safe, quick, and high-quality services covering a wide range of nursing care, through registered and licensed professional nurses from both genders. They also add: "A unique customer experience is something we guarantee in 7keema as we provide our services according to the international standards of healthcare quality and infection control." It is also worth mentioning that their rating on Google Play is 4.3 based on 230 reviews (Cairo 360, 2019).

Other details about the app include the fact that it is owned by Health App Group, provides care 24/7, and is in the process of reaching out to other countries in the MENA region. Facebook mentions that the application comprises a wide selection of nursing services, such as basic care, catheter, wound care, ostomy care, hospital shifts, home shifts, hospice care, post-hospital, post-pregnancy, Alzheimer's, and elderly care (Cairo 360, 2019).

Policy Alternative 4: Raising the capacity and quality of public nursing homes

In this policy alternative, we suggest an increase in the number of care homes to meet the future needs, the utilization of a self-assessment quality tool for elderly homes, propose similar measures to Netherlands' plan to improve the quality of care homes, provide alternative means of funding for increasing care homes, and evidence supporting alternative means of care outside elderly nursing homes.

According to the MoSS website, there are 168 elderly care homes in 22 governorates providing services to 6000 elderly. These care homes provide full accommodation in addition to medical, entertainment and cultural services. 15 of these care homes provide services free of charge and 25 provide services to elderly unable to care for themselves. The MoSS is working on an initiative (Betak) for the development of care homes with a budget of 23 million EGP (MOSS website).

This initiative is directed at care homes in a broader sense, including orphanages and shelters besides the nursing homes for the elderly. The pillars of action include the development of infrastructure, buildings and equipment, building the capacity of the administrative teams, increasing community and social involvement for providing family care for orphans and improving capacity of

orphanages, and the enforcement of standards of care for orphans and elderly in care homes. The initiative also covers training plans for social workers in 159 elderly care homes and 229 orphanages in 10 governorates; Luxor, Aswan, Assiut, Cairo, Giza, Qalyobeya, Gharbia, Alexandria, Suhag, Qiana and prioritizing 3 elderly homes for renovation in Cairo, Gharbia and Suez. The MoSS is also utilizing youth volunteers from Beena Initiative to assess care in elderly homes and orphanages (Moss, 2019).

According to CAPMAS, the elderly population is estimated to be 6.7% of the total population (around 6 million) and this number projected to increase in the future. Within this context, the number of elderly homes might not be sufficient to cover the increase in demand. Upon reviewing some of the data about elderly care homes, we found that there is a variation in the number of care homes and available the places for elderly people in the governorates. In **Cairo**, there are 80 care homes in total after removing the repeats, 12 of which are not working, the remaining have 1007 beds for males and 1426 for females (MoSS, 2019). **Giza** governorate has 20 elderly care homes in total, 3 of which are not working, with remaining 102 beds for males and 331 for females. As for **Alexandria**, there are 21 elderly care homes in total with 1 not working and the remaining have 417 beds for males and 691 for females. In **Assiut** there are 2 elderly care homes with 15 beds for males and 40 for females. **Dakahleya** governorate has 7 elderly care homes, 1 of which is not working with the remaining 42 beds for males, and 87 females. While the majority of the elderly homes in the governorates mentioned above serve urban populations three of the care homes in Dakahleya serve desert areas. In **Aswan** there is only 1 care home with 10 beds for males and in **Luxor** there is only one care home with 10 beds for females. As for **Sharqia** there is a total of 4 care homes with 1 closed. 2 of these serve desert areas and the total beds are 33 for males and 22 for females. In **Gharbia** there are 10 elderly care homes 1 of which is rural and closed with a remaining total of 99 beds for males and 130 for females. It is recommended to increase the number of elderly care homes to avoid unmet needs in the future. It is also noted that the several facilities serve less than 20 elderly which might result in exhaustion of resources without benefit of economies of scale.

Weiner reviewed the impact of different strategies to improve care in elderly homes. These strategies included strengthening the regulatory process, improving information systems for quality monitoring, strengthening the care giving workforce, providing consumers with more information, strengthening consumer advocacy, reimbursement strategies, implementing practice guidelines and finally changing the culture at nursing facilities. He concluded that implementing these strategies results in increased costs and require more resources. Although the literature did not provide evidence on the effectiveness of these strategies, regulation continued to be the main strategy of quality assurance. ("Assessment of Strategies for Improving Quality of Care in Nursing Homes", n.d.) (Wiener, 2019).

In this context we suggest the care inspectorate quality indicator framework (Wiener, 2003) to assist care homes in *self-evaluation*⁽¹⁹⁾. The Care Inspectorate was set up by the Scottish Government as a single regulatory body for social work and social care services.,The framework adopted in the figure below aims at assisting care homes in *self evaluation*. This might increase awareness and demand about the main issues needed to be addressed in quality. The framework suggests five questions to be asked by the facility; how well they support people’s wellbeing, how good is the facilities leadership, the staff , the setting and the planning of care and support with items under each question represented in the table below.

The Quality indicator framework

Key question 1: How well do we support people's wellbeing?	Key question 2: How good is our leadership?	Key question 3: How good is our staff team?	Key question 4: How good is our setting?	Key question 5: How well is our care and support planned?
1.1 People experience compassion, dignity and respect.	2.1 Vision and values positively inform practice.	3.1 Staff have been recruited well.	4.1 People experience high quality facilities.	5.1 Assessment and care planning reflects peoples' needs and wishes.
1.2 People get the most out of life.	2.2 Quality assurance and improvement is led well.	3.2 Staff have the right knowledge competence and development to care for and support people.	4.2 The setting promotes and enables people's independence.	5.2 Families and carers are involved.
1.3 People's health benefits from their care and support.	2.3 Leaders collaborate to support people.	3.3 Staffing levels and mix meet people's needs, with staff working well together.	4.3 People can be connected and involved in the wider community.	
1.4 People are getting the right service for them.	2.4 Staff are led well.			
Key question 6: What is the overall capacity for improvement?				

Figure: The Quality Indicator Framework adopted from the Scottish Government Care Inspectorate for self-assessment of care in elderly homes (Unruh and Wan, 2004). The quality inspectorate framework is concise and aims mainly at self assessment, Unruh and Wan (2004) suggest a more comprehensive framework for understanding the link between the different structure and process measures

19 (Wiener 2003)

and outcomes of care. This framework is mentioned in the references section. The government of the Netherlands after a recent assessment (Ministerie van Volksgezondheid 2017) concluded that the quality of elderly care homes needs should be improved. It developed measures to improve nursing home care including the improvement of the quality of nursing home staff, this involves improving their compassion and treatment of residents of these homes, measures to improve professional education and training with collaboration between the Ministry of Health and the Ministry of Education, measures to increase transparency about the quality of care through publishing results of medications and patient safety in resident homes among other indicators as communication with the residents and family members, staff qualifications and quality driven management, measures to enable patients or their caregivers to manage their own care and support plans and a final measure to enforce and improve government supervision on care homes (Ministerie van Volksgezondheid, 2017).

The Japanese government is also facing the problem of ageing population and made the decision to increase the number of care homes. To secure the financial resources necessary for this expansion, the Japanese government planned to issue non-interest bearing an inheritance tax-free government bonds and is discussing leasing state-owned lands to operators of special nursing homes ("Japanese Nursing Homes to Be Increased" 2015). Increasing the number of caring homes, taking measures to improve the quality of care at these homes, and securing funds are all essential to face the increase in elderly population. Nevertheless, it is important to denote the difference between nursing homes and assisted daily living facilities. In nursing homes, the elderly need medical care besides accommodation, while in assisted daily living facilities the elderly need supporting equipment and means to maintain their daily activities without the supervision of medical staff. The variation in needs of the elderly also led to the development of PACE program in the United States, a program that involves providing a holistic approach to the elderly which is discussed more in the preventive policy alternative (Abyad, 2004). The program aims at the integration on the community level of medical staff, social care and the elderly. In 2014, a federally supported evidence review suggested that PACE enrollees experience fewer hospitalizations and are nearly 30 percent less likely to be hospitalized than a matched comparison group. A 2016 Commonwealth Fund report suggested that the beneficiaries of PACE program's 30-day readmissions rate was half that of other Medicare beneficiaries. Another 2015 study found that PACE enrollees had a 31% lower risk of long-term nursing home admission than enrollees of Medicaid home- and community-based waiver programs, suggesting that PACE may help reduce long-term nursing home utilization, and that 93% of PACE participants report that they would recommend the program to a friend or relative (Abyad, 2004).

This policy alternative of increasing the number of care homes and investing in quality measures is a resource intensive option with higher direct, indirect, tangible and fixed term costs. However, with the current rate of inflation and

projected increase in the opportunity, the cost will be higher if investment is missed at this stage. Additionally, investment in quality measures increases the elderly's safety and reduces the demand on healthcare services. Equity is another important factor in considering this policy option to avoid variation between outcomes and safety of the elderly between the elderly of different social classes. The government might not have the full capacity to implement this option with a need to involve the civil society and private sector. Additionally, the innovative use of technology will help in reducing cost of training such as the Social Care Institute of Excellence in the UK (<https://www.scie.org.uk/>) utilizes webinars for training.

Policy Alternative 5: Family medicine physicians should get more training on geriatric medicine

As a professor of geriatric medicine said: "Geriatric specialty is not attractive for physicians for several causes such as

- The clinical outcome is not so good as many patients have multiple diseases in advanced stages
- The financial income for this specialty is not attractive for physicians such as other specialties such as ICU, orthopedic, and any specialty with intervention,
- Many patients are admitted to ICU units which are overlapping with other specialties."

Getting support or incentives for geriatric medicine specialty may be difficult due to the limited financial resources. Family medicine gets support from the MOH and international organizations as the WHO. Family medicine gets training on different specialties such as obstetrics and gynecology, internal medicine, and pediatrics. MOH can develop a training program for two months, for example for family medicine physicians on geriatric medicine. This can improve the quality of healthcare that is provided to the older people in the rural areas.

IV. Conclusion and Recommendations:

Recommendation

For a proper assessment and evaluation for different policy alternatives addressed in this policy paper, and especially in this particular topic, there is a need for a holistic generalizable approach rather than adopting only one alternative, considering the need to make some economic analysis which was not feasibly accessible at this time. So, there is a consensus to use such a multi decision rule that consists of the time frame it will need to implement the policy. At the same time, some issues should be taken into consideration: the efficiency of the choice and how much suffering it will lessen or the impact it could have among this segment of Egyptian population, the cost pertained, and political acceptability, how equity is being practiced, along with examining the involved stakeholders and the proper policy feasibility analysis.

Assessment of the pre-described policy options / alternatives versus the selected criteria and decision rules as shown below in the table.

Decision Analysis Policies Alternatives.

<i>Criteria</i>	<i>Definition</i>	<i>Policy Alternative One</i> (Geriatric Companion)	<i>Policy Alternative Two</i> (Preventive Policy care)	<i>Policy Alternative Three</i> (IT Solutions)	<i>Policy Alternative Four</i> (Capacity & Quality Building for Public Nursing Homes)
<i>Policy Description</i>					
<i>Time Frame</i>		Ongoing-8 months	Ongoing	Undetermined	

Efficiency	Determined by the amount of providing and including / covering a number of elderly people for their care measured by ministry of. health or the directorate responsible for this particular sector.	Very efficient but needs support for sustainability projections	Needs community awareness campaigns & facilities implementations.	<ul style="list-style-type: none"> • This is considered a leap into the near future services. • A hub for the elderly people data collection in Egypt 	
Cost, political acceptability, and equity		Needs fund allocation Has political acceptability	<ul style="list-style-type: none"> - Not Costly - Politically accepted - Raise level of literacy among target population 	<p>Could be uncostly but needs further cost assessment Neutral political acceptability Needs solid agreement between different parties</p>	<ul style="list-style-type: none"> • Further cost assessment • Direct, indirect, tangible and fixed term costs

<p>Feasibility Analysis</p>	<p>Actors--people, groups, and organizations thoughts and Resources --power, influence, money, staff, public opinion, etc. Effectiveness — leadership skills 5) Sites--agendas, windows of opportunity, sequencing of decisions, etc.</p>		<ul style="list-style-type: none"> • Target the 40/50 population, in introducing them to healthy life-style, exercise programs to prevent muscle weakness. This could be integrated in primary healthcare units. • This is considered an inexpensive policy alternative • Awareness campaigns to address the 'could be prevented health problems' & exercise types to practice • Civil society's engagement for 'better health awareness campaigns'. 		<p>Incentives for a mandatory action of establishing a geriatric department in every newly established hospital, or with every new license granted to private hospitals, and through the new health insurance system. (A more specialized healthcare unit for older populations)</p>
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<i>Involved Stakeholders</i>		MOSs MoHP PPP (Public Private partner- ship)	MoSs Civil society businessmen fund campaigns.	CSR (Corporate Social Responsi- bility) MoSS	MoSS MoHP MoP MoF
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The Addressed Awareness campaigns should tackle

- The lost communication gap between what the ministry offers and what the targeted population knows about
- The prevention care strategy for geriatrics; introduction to special exercise programs, etc

Conclusion

Preferred policy option / alternatives

As shown above, we have come to a consensus that there is no need to choose one over the other, especially if they all can be implemented simultaneously without overlapping and serving the same purpose without constraining the sources available.

However;

- The prevention of complications occur to the elderly could be considered as a very effective and applicable alternative.
- Home nursing services should get more attention to improve the quality of service and increase the capacity building of the employees.
- There is a consensus to implement more than one policy alternative in parallel, since they are not overlapping nor would require major fund sources to be allocated for, and they will complement each other efforts towards one objective in which caring for the vulnerable older people population without care in Egypt.

Implementation strategy for the policy option / alternatives

As discussed above in each policy alternative, how the implementation strategy should take place, it should be noted that without the stakeholders coming together in one table, little could be done. Action plan

No	Task	Name	Duration
1	Develop a policy for evaluating the discharge of older people from the hospital	MOH	3 weeks
2	Develop a physical rehabilitation program in nursing homes to prepare the older people to be active and depend on themselves	MOSA	3 weeks
3	Media awareness campaign about older people issues and how to prevent them	All stakeholders	3 months

Plan for monitoring and evaluation

At this moment, as discussed in many options above, a rigorous monitoring and evaluation plan must take action along with a unified vision and mission that does not change with personnel or other reasons.

Monitoring

There are numerous techniques such as using a predetermined indicator to measure and monitor different aspects of the program (Unitar, 2017).

Evaluation

There could be two ways of conducting evaluation: central evaluation and decentralized evaluations. Centralized evaluations are independent assessments conducted and/or managed by the institute's Planning, Performance and Results Section. It may also include independent mid-term reviews of projects and independent peer reviews of decentralized evaluations for quality assurance purposes in which is supposedly will be done by the different directorate running along the different governorates under the auspices of the Ministry of Social Solidarity (Unitar, 2017).

Evaluation timing

Given the different milestones that should be achieved by the Ministry of Social Solidarity, and the services provision determinants, it is useful to distinguish between intermediate and institutional outcomes (Unitar, 2017).

The following table summarizes the different types of evaluations based on timing and the level of the results chain, adopted from UNITAR; Monitoring and Evaluation Policy Framework 2017 (Unitar, 2017).

Timing and types of evaluation in relation to levels of results

Timing	Types	Level of Results	Remarks/Sample Evaluation Questions
Before the undertaking(ex-ante)	Appraisal; quality at entry; baseline study, needs assessment	N/A	Depending on the scope of the project, evaluation may vary from a thorough examination of the entire results chain logic to a (rapid) assessment of training needs and determining baseline data indicators.
During the undertaking (process)	Real-time, formative, mid-term evaluation	Inputs	E.g. To what extent are human, financial and material resources adequate?
		Actions	E.g. How relevant is the course to the learning needs of beneficiaries?
After the undertaking (ex post)	Summative evaluation	Outputs	E.g. How relevant and effective were the delivered products (action plan) or services (training)? How efficient were the outputs produced?
		Outcomes	Intermediate (short-term) The first level effect of products and services delivered, directly attributed to outputs. E.g. How much knowledge increased if been tackled in awareness Campaigns? Did skills improve? Was awareness raised?

			Institutional /Ministry (medium -term)	Subsequent effects of products or services delivered E.g. Was there retention and/or on-the-job application of knowledge/skills? (Geriatric Companion) Have organizational capacities increased? Are policy instruments more efficient? (Audit parameters)
		Impact		What is the impact of the outcomes? Were project goals met? How durable were the results over time?

Finally, there should be awareness campaigns as part of each alternative; The Addressed Awareness campaigns should tackle

- The lost communication gap between what the ministry offers and what the targeted population knows about
- The prevention care strategy for geriatrics; introduction to special exercise programs, etc.
- The criteria or decision rule we used while evaluating the different policy alternatives
- Increase awareness of the health issues of older people in the community
- Improve communication between all stakeholders.
- Develop a program to prepare older people to keep them active and prevent or delay depending on others.
- Prepare roads and facilities to facilitate transportation of older people to fit their needs.

• **Limitations and unanticipated consequences**

The addressed limitations were regarding the lack of solid data among different parties, and the difficulty in allocating the moving engine for further implementation to such a policy and its related action plan and the need for solid allocation of financial resources for the continuation of work sustainability done in this area along with the proper follow up between different managing stakeholders.

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VI. Appendices

• *Interviews Data*

Conducted open interviews between various stakeholders.

1. Interview with an Assistant Professor working as a geriatric physician at Ain Shams University hospital.
2. Interview with Public Relations Manager in the Ministry of Social affairs in Giza governorate.
3. Interview with the CEO of Al Gwaherr NGO – An Old care facility.
4. Interview with Head of geriatric new hospital –El Dermerdash. Ain shams University, Professor Hala El Sweed.
5. Meeting with Ministry of Social Solidarity Representatives.



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