INTRODUCTION

Aging can be more appropriately defined as the total of all changes that occur in a person, with the passing of time influences on how one ages come from several domains that include the physiologic, psychological, sociological and spiritual process (Miller, 2005).

By 2020, the elderly population throughout the world is expected to increase to 973 million people, and the number of elderly people will be more than triple in developed countries which will account for 71% of the world’s elderly population. In Egypt, the percentage of elderly people represents 6.2% in 1986, and it is estimated to reach 11.3% in 2025 (Ahi, 2008).

The changes in physical appearance are gradual and subtle. Further differences in physiologic structure and function can arise from changes to specific body systems such as: Respiratory system, cardiovascular system, gastrointestinal system, urinary system, and musculoskeletal system changes showing of vertebrae, slight kyphosis, and decrease in bone mass and bone mineral (Ellopoulos, 2010).

Caregiver refers to anyone who provides assistance to someone else who is, in some
degree, incapacitated and needs help. Informal caregiver and family caregiver are terms that refer to unpaid individuals such as family members, friends and neighbors who provide care. These individuals can be primary or secondary caregivers, full time or part time, and can live with the person being cared for or live separately. Formal caregivers are volunteers or paid care providers associated with a service system (Family Caregiver Alliance, 2011).

The goal of home health care nursing is to provide services to individuals and families and to promote, maintain and restore health. In most cases, this is achieved through short term, intermittent, direct nursing care made in home visit and supervise those services to assist with activities of daily living (ADL). The nurse and caregivers how to provide self-care, and use communication skills to enhance continuity of care (Hunt, 2009).

The role of community health nurse focuses on the prevention of disease and promotion and maintenance of health to achieve these goals, nurses are involved in client and community education, counseling, advocacy, care management and three levels of prevention. Health promotion includes many activities such as exercise, nutrition, screening, self-care, relaxation, stress management and accident prevention. The community health nurse should be familiar with the guidelines for screening prevention services, for individuals 60 years and older, (Nehemow & Pousada, 2005).

**Significance of the study:**

Elders in rural areas have high rates of illness and disability. Populations living in rural areas have higher rates of diabetes, hypertension, heart disease, and cancer than those in urban area (Halter et al., 2009).

Health problems naturally increase with age, more than four out of five elderly people live with at least one chronic condition, and many of them especially women have multiple chronic condition, such diseases in aged people caused more disabilities than younger people; thus aged people need special care to prevent diseases, maintain and promote health (Atia, 2008).

In Egypt, the percentage of elderly people represented 6.2% in 1986, and it is estimated to reach 11.3% in 2025. Statistics from the Egyptian Ministry of Health show that there is an increase in life expectancy; over the past three decades, it increased for males from 51.5 to 62.8 years and for females from 53.8 to 66.4 years (CAPMS, 2006).

**The study aimed to:**

Assess the perception of caregivers regarding elderly home health care at kalyobia rural area. Through the following objectives:
- Assessing caregivers’ knowledge about the physio-physical changes and care in elderly age.
- Assessing caregivers’ knowledge about home care for elderly.

**Research questions:**
- Are the caregivers having adequate knowledge about changes, needs, and rights, and care of elderly?
- Is there a relation between knowledge and practices about elderly care and some personal characteristics of their caregivers?

**Subjects & Methods**

**Research design:** A descriptive design was used to achieve this study.

**Setting:** This study was carried out at three rural health units (Moshtohour – Warwara – Gamgara) in Benha. They have the highest density of elderly at Kalyobia Governorate. Then followed by home visit to evaluate care provided to elderly according to his/her health problem.

**Sampling:**

The sample of the present study was a systematic random sample consisted of 100 elderly from total elderly (300) and their caregivers. Then one elderly was selected from each 3 elderly so the sample consisted of 100 elderly, who attended the previously mentioned settings and their caregivers who accepted
to participate in the study. The elderly had the following criteria:

- Both male/female,
- Age above 60 years.
- Mobilized.
- Have Diabetes – Hypertension

Tools of the study:

This study consisted of two tools

1- An interviewing questionnaire:

It is designed to collect data, it consisted of two parts:

Part 1: Includes general characteristics of elderly as sex, age, marital status, educational level, occupation and income, as well as caregiver's general characteristics as: sex, age, marital status, educational level, residence with elderly, caregiver's relationship with elderly and occupation.

Part 2: Consists of questions to cover caregiver's knowledge about elderly as: definition of aging, physiological changes in respiratory, cardiovascular, digestive, musculoskeletal, nervous, sensory, urinary and psycho-social changes, rights and needs of elderly person (physical, social, psychological, environmental and bathroom hazards).

Scoring system:

Each caregiver’s answer was given two points for complete correct answers and one point for an incomplete correct answer and zero for a wrong or don't know answer. The total knowledge score was divided on the knowledge items and converted into percent. The caregivers had satisfactory level of knowledge if the score was 50% or more and had unsatisfactory level of knowledge if they had less than 50%.

2- An observational checklist:

It was designed to collect data about care given to elderly with health problems. It is composed of two parts:

Part 1: It was designed to collect data about caregiver's practices in caring for a diabetic elderly condition as: Urine analysis for sugar, insulin injection, foot care, diabetic diet regimen.

Part 2: It was designed to collect data about caregiver's knowledge-related practices about caring for a hypertensive elderly as: Measuring BP, times of measuring BP, site of measuring BP, having special diet, characteristics of diet content, follow up, follow up schedule, medication taken, and causes for not taking medication.

Scoring system:

A scoring system was followed to obtain the outcome of caregiver's practices about the care for their elderly at home. Total practice score was 53 grades, the sufficient level of practice represented 60% or more of total practice and less than 60% of total practice consider insufficient level of practice.

Operational design:

Ethical considerations:

Agreement (oral consent) on participation in the study was taken from the elderly and their caregivers after explaining to them the aim and the nature of the study, and after answering any enquiry for the caregivers. The subjects were assured about confidentiality of data that will be used for research purpose only. Caregivers were also informed that they had the right to withdraw from the study at any time without giving any reason.

Pilot study:

A pilot study was carried out on 10 elderly and their caregivers attending to the rural health units (Moshtohour – Warwara – Gamgara) in Buhata City in order to test the applicability of the tools and clarity of the included questions as well as to estimate the average time needed to fill in the sheets. Those who shared in the pilot study were excluded from the main study sample.

Field work:

- Official permissions to carry out the study