MEDICAL REPORT

Geriatric Patients in the Accident and Emergency Department Salmaniya Medical Centre

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Although aging is a life-long process, most people consider their aging only late in life. By this time, many of them have in fact accelerated their aging or developed diseases that might otherwise have never occurred. Elderly persons today suffer from medical problems not only commonly but excessively; some 20% of those aged over 80 years must live in long-term care facilities to meet their basic daily needs[1].

Elderly patients need emergency health care more than young patients. Once in the emergency department, the old undergo longer stays, more extensive testing and have a much higher percentage of hospital admissions than young people[2,3].

The proportion of the population that is aged 65 years or over has steadily increased worldwide because of the advances in medical care. In 1980, in the United States, the elderly represented 11.3% of the total population and the projected rate by the year 2000 is 13.1%[3]. As the number of geriatric patients presenting to the emergency department increases, it is essential to know the impact of these patients on emergency facilities and its staff, so that ways can be established of diverting them to their local health centres or social workers.

METHODS

From January 1st to June 30th, 1992, 600 elderly patients above the age of 60 were seen at the Accident and Emergency (A/E) Department of Salmaniya Medical Centre (SMC), Bahrain. The case records of these patients were evaluated for age, sex, nationality, chief complaints, investigations, diagnosis of underlying diseases and management.

A detailed history was taken from the patient and relatives. In life-threatening situations and in unconscious patients, first-aid treatment was given before taking history and physical examination. On presentation, an intravenous line was established in most of the

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cases. Urgent management included splinting of fractures and wound suturing to stop bleeding. In unconscious patients, an airway was established and intubation done when necessary. Sedation with pethidin and morphine was given to patients with chest pain and Lasix to those with pulmonary oedema. Patients who had difficulty in breathing were given aminophylline and Ventolin nebulizer.

Investigations were requested according to the chief complaint. The basic investigations included a complete total and differential blood count, urea, sugar and electrolyte studies. Additional investigations were performed as deemed necessary.

When the patient was stabilised, he/she was referred to a speciality firm within SMC for admission and/or further management.

RESULTS

Out of the 600 elderly patients, 392 (65%) were males and 208 (35%) females. Three hundred and fifty (58%) were between 60-70 years, 150 (25%) 71-80 years, and 62 (14%) 80-90 years old; and only 18 (3%) above the age of 91 years. There were 594 (99%) Bahraini and 6 (1%) non-Bahraini.

Blood count and electrolyte studies were done for all patients. X-rays were done for 578 cases and ECG tests for 594 patients. Intravenous lines were established for 92% of the patients.

Table 1
Medical Problems of 600 geriatric patients attending A/E Department, January – June 1992

Problems	*No. of Patients*	*Percentage*
Respiratory	160	27
Cardiovascular	126	21
Gastrointestinal	54	9
Fractures	44	7
Central Nervous System	44	7
Diabetes Mellitus	44	7
Bed sores	44	7
Geriatric	28	5
Orthopaedic	20	3
Urinary Tract Infections	10	2
Surgical	10	2
Burns	10	2
Psychiatric	6	1

Table 1 shows the medical problems presented by the 600 patients, of whom 369 (61%) were admitted to hospital and 231 (39%) sent home after treatment in the A/E Department. One hundred and fifteen (19%) patients were brought to the Department with life-threatening emergencies which included pulmonary oedema, respiratory failure, myocardial infarction, hypoglycaemia and sepsis.

DISCUSSION

The population of Bahrain has increased by 47% in the last decade[5] and the percentage of the elderly has increased from 2.2 to 2.4%[2]. The elderly population represents an ever- increasing proportion of the patients attending the emergency department[3,6]. Elderly patients use one-third of the hospital beds[5].

Many old people in Bahrain are being abandoned by their families to live alone, with the changes in lifestyle resulting in many problems, including frequent visits to the A/E Department of SMC. Most of the patients brought here suffer from chronic problems including bed sores, contractures, malnutrition and dehydration. There is a long waiting-list for admission for the geriatric hospital. Isa Town Geriatric Hospital has 24 male and 24 female beds, whereas the capacity of Muharraq Geriatric Hospital is 57 male and 64 females, making the total bed strength 169. These hospitals have 100% occupancy throughout the year.

In six months, there were 600 geriatric patients visiting the SMC A/E Department, ie. about 3-4 patients per day. With the limited space of 12 multiple purpose cubicles, if 3-4 beds are occupied by these elderly, only 8 are left for the remaining patients. This is persistently causing accommodation problems in the Emergency Department. A separate treatment area in A/E is therefore needed for these patients.

The underlying medical problems that were found in the 600 patients are similar to those found in studies conducted in other centres[4]. Schwartz reported that 23% of the elderly who presented to A/E had cardiovascular problems, 5% diabetes mellitus, 4% central nervous system disorders and 1% osteoarthritis[4]. Similar studies were conducted in California and Wisconsin in which 29% of the patients had cardiovascular problems, 3% respiratory diseases, 5% diabetes mellitus, 6.5% osteoarthritis and 1.5% fractures.

The problems found in another two studies are also similar to ours. The only difference was that respiratory problems and nervous system problems are higher in our

study ie. 27% and 7% respectively whereas in other studies it was 3% and 1% respectively. The diabetic and osteoarthritis problems are approximately the same (Table 1).

CONCLUSION

The geriatric problem is an important problem faced by the A/E Department, SMC, due to space-related problems. It is also taking a significant proportion of time away from emergency room physicians.

There is a need for social workers to visit these patients and advise on nursing care. There should be a sufficient number of beds in old peoples' homes, otherwise another geriatric hospital will be needed to accommodate them. Minor ailments should be treated at local health centres, and only serious cases be referred to A/E Department.

An educational programme needs to be conducted for the general public on how to take care of the elderly and disabled. A need exists for training in medical, ethical and social aspects of emergency care of elderly patients.

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