An older person as a subject of comprehensive geriatric approach

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Abstract

The simultaneous presence of many disorders (physical, psychological, and social) and unmet health care needs in elderly people require a more complex assessment then just a routine diagnostic examination. The involvement of comprehensive geriatric assessment provides a health care model that integrates medical and nursing care with social support. A geriatric assessment could be carried out in a wide variety of settings including: acute hospital units, long-term care, out-patient dispensaries and home visits. A holistic and comprehensive geriatric approach should cover physical, functional and mental assessments as well as the caregiver's strain. For preventive care, effort should be placed on the aspect of health promotion, diseases prevention, and disability postponement. Rehabilitation is an important area for older people, as a majority of them requires a temporary rehabilitation after a major illness before they could regain independence in the community. In order to provide a cross comparison among different patients in different settings, a standardized methodology or instruments will enable to make comparisons better then subjective investigation. To provide a holistic and interdisciplinary health care for the elderly, training doctors, nurses and other health care professionals in geriatrics and gerontology is essential.

Key words: geriatrics, comprehensive geriatric approach, team approach.

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The aging process is a physiological phase in an ontogenesis. Nevertheless, age-related changes are most often accompanied by the effects of previous diseases, injuries, as well as co-existing multi-morbidity. The biological ageing can be described as metabolic, degenerative, inflammatory or autoimmunological disorders, however, all of them lead to the restriction of the organism's functional reserves [1,2].

The functional deficits that progress with age are visible at the level of the organ's impairment in the form of initially latent, circulatory, respiratory, excretory, auditory, visual and many other organs' failures, as well as at the functional efficiency of the entire organism – locomotive, instrumental and personal activities of daily living. At the beginning, the dysfunctions are most often visible in the range of more complex activities, such as: housework, shopping, preparing meals, managing one's own finances, using the telephone, cash machine, computers, and later on in basic activities such as: bathing, keeping oneself clean, using the toilet, moving from the chair to the bed, getting dressed/undressed, or eating by one's self.

The functional dysfunctions of the different organs, as well as the entire organism require a holistic, multi-speciality and comprehensive approach, as well as the involvement of medical and non-medical practitioners, not just medical doctors [3]. The family and the community are undoubtedly always needed. Nurses and physical therapists in first order after, then social workers, psychologists, occupational therapists, dieticians, and others, however always a family caregivers and the society.

Geriatrics is a specialisation, which integrates an interdisciplinary approach. Its aims may be summarised as follows:

- Maintaining health in old age by high level of engagement and avoidance of diseases;
- Early illness detection as well as appropriate and effective treatment;
- Maintaining maximum independence and autonomy despite the existence of illnesses and disabilities;
- Guaranteeing care and support in the event of terminal illnesses.

Geriatrics also referred to as clinical gerontology or medical science for the advanced age is one of the younger medical disciplines. Its development has taken place over the last decades as a response to the widely prevalent and specific socio-medical needs of the older people in an aging population.

In the perspective of a life cycle geriatrics constitutes the last link in a triad of basic medical disciplines after paediatrics and "mediatrics", i.e. classical internal medicine. Geriatrics has evolved from internal medicine due to the specifics of the symptomatology of illnesses at an elderly age, the distinction of their course, and the complexity of medical problems determining or causing non-medical problems – environmental, care giving, psychological, ethical as well as demographics. It is also characterizes by a holistic approach to the patient. To a smaller extent, geriatrics are oriented in diagnosing and treating individual internal diseases and to a larger extent in identification and solving polyaethiological problems resulting from the multi-disease and multi-organic character of age-related disorders.

Geriatrics is mainly focused on the complex character of pathology – the effect of overlapping of age-related decline and multi-morbidity. Age-related health problems go beyond the scope of the traditional internal medicine, as exemplified by certain diseases typical for old age, such as neurological conditions (stroke, Parkinson's disease), psychiatric conditions (dementia, depression), urological conditions (incontinence, prostate hypertrophy), ophthalmologic conditions, rehabilitation problems and many other conditions. This illustrates the interdisciplinary nature of geriatrics in the scope of medicine.

Due to environmental and social context of aging, the interests of gerontology exceed the scope of medical science and include issues bordering on other sciences – sociology, psychology, demographics, and even law or architecture – in the extent that they concern the elderly. This is the proof of the interdisciplinary character of gerontology, also in its non-medical meaning.

Principles of geriatric care

Arguments of demographic, social and biological nature pose specific requirements on all medical professions, particularly on doctors and nurses. Meeting those requirements depends on complying with the basic principles of the geriatric care. These include: commonness of the care, its availability, continuity, high quality, individualisation and comprehensiveness, as well as integration with other services [4].

Another principle calls for respect for the patients' autonomy and providing them with access to the social care system.

Family doctors have the potential to meet the requirements of geriatric care. They care for all patients who trust them. They are, or should be widely available on an everyday basis, since they are practitioners in the local communities. They provide medical care on a continual and lasting basis, and a minimum competence in geriatrics is required from them. Regardless of their motivations, intentions or competence, family doctors are, in fact, the "forefront geriatricians" [5,6].

Nurses are the doctor's main partners in providing overall geriatric care, not only on the level of primary health care. Each of these practitioners has his or her own professional instruments or tools – its use and exchange of conclusions from applied procedures is conducive to prompt and comprehensive assessment and remedy to the patient's problems. Nurses and doctors form the main stem of the interdisciplinary and comprehensive geriatric team approach, into which they should include other specialists. Due to the huge component of social and financial problems of many elderly patients, including a social worker in such team is highly desirable on a permanent basis.

Role of pathology in old age

The most important aspect of the aging body is the progressing loss of stability of the homeostasis and, consequently, the increasing odds of death [2,4]. Decline in the buffer capacity of the homeostasis results in its growing instability, which predisposes to death, in result of stressors, like infections, bleeding, surgical procedures, etc.

The co-existence of many diseases and multi-organ disorders, along with results of former surgical procedures and injuries causes diagnostic problems, particularly in frail older persons.

Another factor impeding early diagnosis and treatment is the occult and atypical presentation of a condition, which results in its relatively late manifestation. Quite often general discomfort and confusion are the only symptoms of pneumonia, while other, physical symptoms are scant and atypical. In such case only changes revealed in lung x-rays can help in diagnosis. The characteristic feature of the pathology of the old age is the susceptibility to sudden deterioration, particularly when early treatment has been delayed or neglected altogether. This is another proof of deterioration of adaptive mechanisms of the body in old age.

Taking into account the significant limitation of natural functional reserves of the old body, inhibition and limitation of recovery after serious conditions should be taken into account. Complications and side effects of medications used for co-occurring conditions are liable to occur.

Other features of pathology in old age are nutritional disturbances. They result from malnutrition, malabsorption or interactions with drugs, while the deficiency of vitamins and minerals can imitate illnesses or be viewed as symptoms of ageing.

Iatrogenic symptoms, or unintentional results of pharmacological treatment, are particularly dangerous for elderly people, for example due to a much higher intake of drugs in comparison with younger persons. Symptoms of undesirable effects of drugs are not distinctive. Sometimes they are treated symptomatically, using other pharmaceuticals. Such a hazard is even more possible, when there is no communication between different doctors prescribing medications to the same patient.

Environmental determinants of a disease are an immanent attribute of pathology of the older people. Identification of the environmental risk factors, including assessment of the patient's independence in activity of daily living is the basic prerequisite of proper diagnosis and treatment.

The specific and multidimensional scope of health aspects of the elderly calls for revaluation of the definition of health

in old age [7]. It should be described in three dimensions: (1) as a lack of illness; (2) as keeping best possible functions; and (3) as existence of an adequate support system (family, health care, community, social). Old persons, even when suffering from different conditions, can be viewed as "healthy", when the pathology does not result in significant limitation of their functioning (e.g. well controlled diabetes) or when their functional efficiency is provided by efficient rehabilitation and community care.

Aims and stages of the overall geriatric care

The principal aim of treating the elderly is to keep and reinforce their functional efficiency in order to restore their ability to independent life in the community, and, consequently, to offer them the best possible life quality in old age. Eliminating illnesses in old age is not an aim in itself, unless it substantially influences the quality of life, physical, emotional and mental fitness. The process of geriatric care has four stages [4].

STAGE 1

ASSESSMENT OF THE HEALTH STATE (physician, nurse)

- FUNCTIONAL ASSESSMENT (nurse, psychologist, physician)
- RESOURCES (nurse, social worker, physician)

STAGE 2

DETERMINATION OF THE AIMS OF CARE GIVING

- What are the principal needs of the patient?
- What are the available remedies?
- To what degree the task is feasible?

STAGE 3

SPECIFICATION OF THE ACTION PLAN

- Actions aimed at assimilating "patient's needs" with "community resources"
- Therapy, rehabilitation, community aid

STAGE 4

REGULAR CONTROL

- Does the improvement meet the expectations?
- Does the applied plan need any changes?

The first aim to achieve is an overall assessment of the patient's health state, including a comprehensive diagnosis and prognosis. In this stage it is crucial to determine the influence of the disease or other health problems on the degree of the functional disability. That should involve standardized measurements [8] which assess the ADL, cognitive functions, e.g. MMSE (Mini-Mental State Examination) [9], emotional functions, e.g. The Geriatric Scale of Depression [10]. Currently most of the scales are available in Poland in the format of a questionnaire consisting of modules (EASYCare) [11,12], which plays a role of an assessment system of an older person in his or her environment. The standardization of evaluation allows monitoring and control of the patient's state in long-term observation, as well as comparison in cross-sectional studies.

The comprehension of the geriatric care should be preceded by the complexity of assessment, including identification of available community resources, remedies (support of family, neighbours, volunteers, self-help organizations, public system of social welfare, etc.). It is also important to appreciate cultural values and mentality of the patients, as well as their education, since the positive results of the evaluation have beneficial influence on treatment and they also aid communication.

In the second stage of geriatric care, it is important to find answer to the following question: "What is the principal need of the elderly person and what are the realistic chances to meet that need". Usually the problem refers to very old persons and concerns health needs, aid needs, comforting pain, social life, etc. Identification of the aims requires a communication among the physician, the community nurse and, often, a social worker on one side, and the patient and possibly his or her carer on the other.

Having identified the aims of the geriatric care, the findings should be shifted into a plan of action, and individual tasks should be assigned to the members of the geriatric care team [3]. Each of the team members is responsible for supervising results of the actions taken and possible changes. The division of tasks among the members of the geriatric care team usually reflects their professions – the family doctor is responsible for treating health problems, the community nurse for adapting homes, nursing, therapy, tests, education, control of how the doctor's orders are fulfilled, while the social worker for providing social services, in kind or in financial aid. Another two team members are of great importance – an occupational therapist and a physiotherapist. Their task is to prepare the patient and his immediate surroundings in such way that would allow the patient to live in his home on his own.

The most critical situation that requires effort of the geriatric care team is the discharge of a patient from hospital after a serious condition (cerebral or heart stroke, surgical procedure, etc.). Maintaining contact with the hospital and preparing the patient's environment in advance significantly improves results of such actions.

In terms of home therapy and care, the geriatric giants belong to particularly difficult conditions [13,14].

The role of the geriatric prevention

It is a well-known fact that preventive actions reduce mortality caused by age-related conditions. Controlled randomised studies proved the positive effects of a comprehensive and interdisciplinary approach, planning and implementation of long-term care for elderly persons in their own living environment [15]. Carrying out screening examinations aimed at early diagnosis of disorders that may result in disability and loss of autonomy of very old persons (75 and older) results in delaying the institutionalisation and prolongs the life independence of the elderly [16,17].

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