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Problems of defining disability

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# EPIDEMIOLOGICAL ANALYSIS OF SELECTED MEDICAL AND SOCIAL PROBLEMS CONNECTED WITH NON-INFECTIOUS DISEASES IN POLAND

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### INDICATIONS FOR ORTHOPEDIC SUPPLY AND AUXILIARY MEANS FOR DISABLED WITH REFERENCE TO PRIME MINISTER ORDER

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#### Introduction

The disability has an important influence on a person's picture of his own body and shaping of his self-rating. The disabled perceive themselves and the surrounding reality usually in a different way as compared with fully fit persons and frequently have problems with the proper self-rating. This situation may generate many difficulties in everyday life. That is why these persons require concern, support and attention including treatment, care, rehabilitation and also supplying them with orthopedic items and auxiliary means [7]. The environment of the sick and disabled persons, the milieu where they live include not only the direct help in performing activities with which the patient does not manage but also the education and showing the way of substituting the lost abilities. In spite of the existing limitations, disorders and dysfunctions, the disabled should strive to the rational appraisal of their possibilities and to develop the fitness that remained by making use of the compensatory capabilities [5]. The proper choice of the orthopedic supply and auxiliary means improves the patient's self-rating, the picture of his own body, the comfort of living and functioning in the society. The patient may expect a proper assortment of the orthopedic supply and auxiliary means on the basis of the Prime Minister Order on 10 May 2003 [6].

Aim of paper and material

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The aim of the paper is to show the benefits for disabled or chronic patients which result from applying the orthopedic supply and auxiliary means among sick persons provided with the long-term home care realized by the nurse within the contract with the National Health Fund.

The studies were performed in Lublin among fifteen persons (i.e. 100% of all patients/customers of one nurse from the long-lasting home care) during the period ranging from September 2003 to April 2004. In this period, basing on the environmental history of patients provided with long-term home care and the observation and analysis of their medical documentation, the data were collected concerning their health state, their needs as concerns their nursing care and the orthopedic supply and auxiliary means applied to them.

## Orthopedic supply and auxiliary means applied to patients – results of analysis of research material and its discussion

The long-term home care performed by the nurse at the patient's home and at his environement includes among other the tasks related with self-acceptation by the disabled in the course of illness and limited physical fitness. The nurse who realizes the process of looking after the patient is based on the nursing diagnosis which considers the bio-psycho-social aspects of the disabled and takes into account the patient's individuality and his needs.

An important aspect of the nurse's care is to implement the activities preventing and removing the pain and the stress. According to the definition of the International Organization of the Research on Pain, 'pain is an unpleasant sensory and emotional experience related with the real or potential damage to the tissue' [4].

Frequent pain responses, the general exhaustion caused by the illness and disability are the plausible results of the incessant and too heavy stress [2]. The nursing of a sick or disabled person during the long-term home care is aimed at insuring him the professional nursing with wide range of psychotherapeutic activities, and also rehabilitating procedures and recommendations as concerns the orthopedic supply. The use of the othopedic objects and auxiliary means as one of the elements of the complex and modern orhopedic supply [6] facilitates treatment and reduces the effects of disability of the sick persons. In the practice this means the nurse should know the orthopedic supply and auxiliary means, be able to select and use a given supply [3].

The aims of therapeutic use of the orthopedic supply are among others:

Prophylaxis of deformation

Support of gait and of basic everyday activity of the sick person

Analgetic effect [5].

The indications for the orthopedic supply and auxiliary means in patients provided with the long-term home care are following:

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- · Hemiplegia
- Paraplegia
- Tetraplegia
- Foot drop
- · Degenerative changes of osteoarticular system
- Amputations
- · Complications of diabetes
- · Flaccidity of anal and urethral sphincters
- · Involuntary micturition and defecation
- · Antidecubital prophylaxis
- · Tilting a patient to erect position
- · Learning to walk and move on one's own
- Abdominal hernias [6].

We have performed the analysis of the binding (i.e. totally or partially refunded) orthopedic supply and auxiliary means applied to patients provided with the long-term home care who displayed various disease entities The disabled and chronic patients received the following kinds of orthopedic supply and auxiliary means (Fig. 1-6).

- 1. Wheelchairs
  - 2. Walking frames
  - 3. Supports
  - 4. Four-legged and three-legged supports
  - 5. Crutches
  - Cubital sticks
  - 7. Orthopedic shoes
  - 8. Fibular splints with string puller
  - 9. Foot-shin posterior apparatus
  - 10. Tutor of palm and wrist
  - 11. Schantz type collar
  - 12. Abdominal trusses
  - 13. Suspension of sling type
  - 14. Antidecubital mattresses
  - 15. Antidecubital cushions
  - 16. Nappy-panties
  - 17. Anatomical inserts
  - 18. Catheters.

Each insured patient is entitled to the named assortment of the orthopedic supply and auxiliary means is due to and its cost is refunded by the National Health Fund on the basis of the full or partial reimbursement.

From 1<sup>st</sup> January 2004 a new law concerning completion of orders on the orthopedic supply and auxiliary means has come in effect. According to these rules the orders on the orthopedic supply and auxiliary means should be confirmed by the proper branch of the Fund before accepting their completion.

Different rules apply to the orders on monthly supply of some auxiliary means (e.g. anatomical inserts or nappy-panties).

The insured persons are entitled to the refundable orthopedic articles on the base of order made out by a family doctor or a specialist authorized to make them out. The order for the orthopedic articles expires 30 or 90 days after its issue (this depends on the kind of supply). The expiry date is however suspended for the time of waiting for the order confirmation. The order for orthopedic articles can be registered and confirmed by the patient or by his plenipotentiary, carer or guardian – personally or by mail. In case when the patient is for the time being outside his residence, one can confirm his order in the branch of the National Health Fund in the area where he stays at present [6, 8].

In case of the group of patients included in our studies the full refund was used by patients who in accordance with the directive [6] received the following assortment:

- Truss
- Schantz type collar
- Tutor of palm and wrist
- Foot-shin posterior apparatus
- Fibular splint fitted to orthopedic shoe
- Orthopedic shoes for orthopedic appliances
- Wheelchair.

On the other hand, a partial refund (a patient charge is 30% of the supply and the remaining 70% is covered by the National Health Fund) was used by patients who received:

- Urologic catheters
- Anatomical inserts
- Nappy-panties
- Antidecubital cushions
- Antidecubital mattresses
- Suspension of sling type
- Orthopedic shoes made for patients with various anomalies of feet but not intended for apparatuses nor fibular and tibial splints
  - Crutches
  - Cubital sticks
  - Four-legged and three-legged supports
  - Walking frames
  - Supports.

Considering the kinds of disease and the degree of disability these persons are compelled to use constantly the orthopedic supply and auxiliary means. At the same time they have smaller funds at their disposal because they support themselves from allowances and pensions. The orthopedic supply and auxiliary means granted to the disabled and chronic patients are rather expensive assortment. Thus the reimbursement allows the disabled to improve their

financial situation. It enables to save the means for other aims connected not only with care but also with everyday life. The received supply has a beneficial impact on the improvement of patient's fitness and comfort of his life. As a result the patients became livened up and showed grater willingness to interaction. The patient who received support in the form of supplies and auxiliary means felt secure. He had sense of attention and care of him, was satisfied and more motivated for activity. Otherwise (when the patient waited for a long time for granted supplies or was not subsidized despite low income) in the analysed group of patients a resentment, regret, the sense of neglect and reluctance to cooperation were observed. In this situation the self-rating of the patient's health state and the appraisal of the provided services also considerably deteriorated. The patients got confused, felt abandoned and unwanted. It should be noticed that the patient frequently has a limited access to the orthopedic supply and auxiliary means due to the decision of the Minister of Health concerning their period of use. The majority of the assortment has the period of use of three years. This concerns the following equipment: apparatuses, tutors, prostheses, corsets, collars, walking sticks, crutches, and four- and three-legged supports.

The five year period of use includes the following equipment: wheelchair, walking frames and supports.

Once a year the patient is entitled to: the orthopedic shoes (for winter or summer but not simultaneously for the both types of them), truss and stump stockings (12 pieces for each amputated limb).

On the other hand, the patient is entitled to antidecubital cushion mattress once every two years and to antidecubital mattress once every three years. These two objects wear out much more rapidly than it is described in the order of the Minister of Health on 10 May 2003 and in this situation the patient is obliged to buy them himself without the possibility to apply for the reimbursement.

It is very important both for the patient himself and his minder to supply in the auxiliary means such as: catheters, nappy-panties and anatomical inserts. The patient is entitled to these means once every month but in the quantities which are considered by him and by the nurse as too small and not sufficient to ensure the proper cleanness and prophylaxis of complications. The nappy-panties and anatomical inserts can be purchased in a quantity of sixty per month (this quantity is too small for the needs of patient with the urinary and fecal incontinence) and the catheters are purchased in the quantity of thirty pieces per month [6].

The disabled/chronic patient attended with the long-term home care wants and readily uses the orthopedic supply and auxiliary means even in spite of the introduced limitations. Some patients buy the missing equipment because of their physiological needs for the orthopedic supply seeking the possibilities to improve their life comfort.

#### Conclusions:

- 1. Patient who receives the orthopedic supply and auxiliary means felt the improvement of his health and comfort of his life.
- 2. The patient's health self-rating and belief in his capabilities increased.
- 3. The sense of security of persons supplied orthopedically increased and this resulted in their greater openness for the proposed activitites of the nurse.
- 4. The patient expects to do away with 30% payment for the received orthopedic supply and auxiliary means and to shorten the time of waiting for a particular article.



Figure 1. Schantz type orthopedic collar applied for stabilization of a segment of cervical spine.



Figure 2. Cubital sticks with attached strap stabilizing metacarpus.



Figure 3. Patient with multiple sclerosis using the wheelchair (1) [for longer range of moving] and the cubital sticks (2) [during assuming erect position].



Figure 4. Hemiplegic patient wearing orthopedic shoes for summer with applied fibular splint.



**Figure 5.** Foot-shin posterior apparatus applied for foot drop.



Figure 6. Suspension of sling type applied for left upper limb paralysis (1) and tutor stabilizing the left wrist [2].

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