РЕХАБИЛИТАЦИОННИ ГРИЖИ ПРИ ПАЦИЕНТИ С ХРОНИЧНА ОБСТРУКТИВНА БЕЛЮДРОБНА БОЛЕСТ

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РЕЗЮМЕ
Хроничната обструктивна белодробна болест (ХОББ) е често срещана, предотвратима и лечима болест, характеризираща се с персистиращи респираторни симптоми и обструкция на дихателните пътища и/или алвеоларни увреждания, обикновено причинени от значима експозиция на вредни частици или газове.

Най-честите респираторни симптоми са задух, кашлица и/или експекторация. Пациентите подценяват тези симптоми. Болестта е вредна причина за смъртност. Тя засяга около 329 милиона души в цял свят. Тези данни показват увеличение от 65% от 1990 г. насам. През 2013 г. болестта е влече преди всичко нещата се разкриват с 2 900 000 смъртни случая, спрямо 2 400 000 през 1990 г. Бързите на леталните случаи се разкриват да продължават да нарастват, поради по-изразеното излагане на рисковите фактори, от които най-вече тютюнопушенето. Прогнозите се прецени, че до 2020 г. тези негативни тенденции ще се задълбочат. Според различни оценки 4–6% от населението над 40-годишна възраст в Европа страда от ХОББ, като честотата на заболяването нараства с възрастта.

Дейности от ежедневния живот, като изкачване на стълби или наклон, се превръщат в ежедневна битка за живеещи с ХОББ. Повечето хора не прекарват времето си, мислеейки за своето дишане, но другите едри и секреторност се използват на всеки ден. ХОББ е тежко заболяване, но има известни стъпки, които да се избегнат увреждане на физическата активност.

ВЪВЕДЕНИЕ
Хроничната обструктивна белодробна болест (ХОББ) е често срещана, предотвратима и лечима болест, характеризираща се с персистиращи респираторни симптоми и обструкция на дихателните пътища и/или алвеоларни увреждания, обикновено причинени от значима експозиция на вредно вещества.

Ключови думи: ХОББ, физиотерапия

REHABILITATION CARE FOR PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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ABSTRACT
Chronic obstructive pulmonary disease (COPD) is a common, preventable and treatable disease characterized by persistent respiratory symptoms and airway obstruction, and/or alveolar damage, usually caused by significant exposure to harmful particles or gas.

The most common respiratory symptoms are shortness of breath, cough, and/or expectoration. Patients underestimate these symptoms. Illness is the leading cause of mortality. It affects around 329 million people worldwide. These figures show an increase of 65% since 1990. In 2013, the disease increased by 2,900,000 deaths, up from 2,400,000 in 1990. The number of deaths is expected to continue increasing, due to more pronounced exposure to risk factors, the most significant of which is smoking. Prognosis indicates that by 2020 this negative trend will deepen. According to various estimates, 4-6% of the population over 40 in Europe suffers from COPD, with the incidence of the disease increasing with age.

Daily activities, such as climbing stairs or walking on a slope, become a daily battle for those living with COPD. Most people do not spend time thinking about their breathing, but others’ daily lives are centered around it. COPD is a serious illness, but there are some steps to prevent it from getting worse. This worrying data is a strong argument in the need to do more for people with COPD to keep their condition under control.

The purpose of the study is to review the literature on the usefulness of respiratory physiotherapy.

Keywords: COPD, physiotherapy

INTRODUCTION
Chronic obstructive pulmonary disease (COPD) is a common, preventable and treatable disease characterized by persistent respiratory symptoms and airway obstruction, and/or alveolar damage, usually caused by significant exposure to harmful particles or gas.

The most common respiratory symptoms are shortness of breath, cough, and/or expectoration. Patients underestimate these symptoms. Illness is the leading cause of mortality. It affects around 329 million people worldwide. These figures show an increase
Outpatient respiratory physiotherapy is the most cost-effective, a safe environment and the availability of trained staff. Most of the studies describing the effectiveness, a safe environment and the availability of trained staff. Most of the studies describing the in stationary conditions, rehabilitation may be performed in which the patient is admitted directly as indicated, and a need for care is ascertained during admission depending on the aggravation of the health state. This setting is more appropriate for patients with COPD, as hospital outpatient programs.

Benefits of respiratory physiotherapy have come from specialized practice. Its potential benefits include cost-effectiveness, a safe environment and the availability of trained staff. Most of the studies describing the benefits of respiratory physiotherapy have come from hospital outpatient programs.
Rehabilitation Care for Patients with Chronic Obstructive Pulmonary Disease

Home rehabilitation is the most comfortable for the patient. This method can extend the benefits of rehabilitation, although in severely impaired patients it may not be as successful and effective as it is limited by the patient’s disability. Potential disadvantages of home rehabilitation include the limited presence of a multidisciplinary team, only partial availability of equipment, and not being covered by health insurance. The perfection of such a program could be ensured by creating a targeted rehabilitation program in a home environment with the participation of a multidisciplinary team (3,10).

ESSENCE
Respiratory physiotherapy is a broad-spectrum program that aims to improve physical state and increase the mental well-being of people with chronic respiratory illnesses. Lack of exercise leads to a decrease in muscle tone in patients with COPD, disrupts the breathing mechanics, which in turn leads to more manifested and aggravated concomitant disease symptoms, increased frequency of exacerbations and manifestations of respiratory failure. Lack of physical activity can unlock a vicious circle that can lead to cardiac ailments and musculoskeletal problems. Exercise has been proven beneficial in COPD patients by improving functional capacity and supporting respiratory muscle tone. Aerobic exercise with resistance included in the training process are widely used in respiratory physiotherapy in chronic pulmonary diseases. The main objective of this rehabilitation is to improve functional capacity and thus to improve quality of life (7,8).

A number of researchers have cited the effects of respiratory physiotherapy, which are:

- Exercise improves gas exchange;
- Breathing mechanics and shortness of breath are improved;
- The strength of the expiratory and inspiratory muscles is increased;
- Exercise tolerance is improving;
- The mechanical efficiency of breathing is also improved and the vital capacity is increased;
- Improves overall quality of life, relieves symptoms of anxiety and depression;
- Hospital stay is reduced.

The following recommendations should be taken into account when setting up an individual rehabilitation program:

- The exercise plan must be individually tailored to the patient’s illness and abilities.
- In a state of persistence, aerobic exercise is rec-
рехабилитация е да се подобри функционалният капацитет и по този начин да се подобри качество на живот (78).

Редица изследователи посочват ефектите на ре- 
спираторната физиотерапия, които са:

• Физическото упражнението подобрява газоо-
бмена;
• Механиката на дишане се подобрява и заду-
хът намалява;
• Силата на ексипираторните и инспираторните 
мускули се повишава;
• Толерантността към упражнения се подобря-
ва;
• Механичната ефективност на дишането също 
се подобрява и жизнената капацитет се уве-
личава;
• Подобрено цялостното качество на живота, 
облекчават симптомите на тревожност и 
депресия;
• Престоят в болницата се намаля.

При изграждане на индивидуалната рехабилита-
ционална програма трябва да се имат предвид след-
ните препоръки:

• Предписанието на упражнения трябва да бъде 
индивидуално съобразено с болестта и въз-
можностите на пациента.
• В състояние на устойчивост аеробните уп-
ражения се препоръчват като част от бело-
дробна рехабилитация. Интервалното обу-
чение, което се представя с присъствието на 
период между две групи упражнения, дава 
възможност за увеличаване на натоварването 
от упражнения. За долния крайник препо-
ръчваните упражнения са: ходене, джогинг, 
гребане, кръгове и плуване.
• Сърдечната честота, кислородната консума-
ция и оценката на възможно натоварване се 
вземат предвид, докато се предписва интен-
зивността на упражненията.
• Упражненията както с ниска, така и с висо-
ка интензивност, са полезни при болнобробни 
заболявания с различна тежест, като се има 
предвид, че ползите от тренировката се уве-
личават с увеличаване на интензивността.

Във всички случаи продължителността на тренировката варира в зависимост от индивидуалната толерантност на пациента.

ommended as part of pulmonary rehabilitation. Interval training, which is represented by the presence of a period between two groups of ex-
ercises, makes it possible to increase the exercise 
load. For the lower limbs, the recommended ex-
ercises are: walking, jogging, rowing, cycling, 
and swimming.

• Heart rate, oxygen consumption, and assessment 
of possible exercise are taken into account while 
prescribing the intensity of exercise. Both low-
and high-intensity exercises are useful in pulmo-
nary conditions, since the benefits of the workout 
increase with increasing intensity.

• Both low- and high-intensity exercises are useful 
for pulmonary diseases of varying severity, given 
that the benefits of the workout increase with in-
creasing intensity.

• Exercise with a target heart rate for at least 20-
30 minutes is recommended. If the patient is able 
to perform 20-30 minutes of continuous exercise 
within the target heart rate range, then 3-5 evenly 
spaced sessions are recommended. In all cases, 
the duration of training varies depending on the 
individual patient’s tolerance. Frequent rest peri-
ods can be filled with exercises to achieve a total 
of 20 to 30 minutes of training with breaks (2,5).

CLINICAL TRIAL RESULTS

After rehabilitation has been conducted in various 
conditions, patients report improvement of the quality 
of life, reduction of respiratory symptoms, increased 
exercise tolerance, and the ability to perform daily ac-
tivities, leading to greater independence. The number of COPD patients worldwide who benefit from a pul-
monary rehabilitation program is not small. Although 
some report that one quarter to one third do not re-
spond to it, this is the reason why part of the studies 
fail to identify important moments of success or fail-
ure of the treatment. A large, prospective, controlled 
study is needed to investigate the possible effect of 
pulmonary rehabilitation on mortality. However, as 
COPD patients are more exercise tolerant and being 
hospitalized less often after rehabilitation, survival 
rates are increasing. Since pulmonary rehabilitation 
provides these benefits, it is reasonable to note that it 
is an effective tool for protecting human health (6,9).

CONCLUSION

Literature data indicates that respiratory physiother-
apy reduces shortness of breath, increases exercise 
tolerance, promotes better psycho-emotional state and 
improves the quality of life in patients with COPD.
For best results, patients should be carefully selected to make best use of physical resources and to maximize the benefits of the rehabilitation care. Although there are unresolved issues, respiratory rehabilitation programs should be included in the comprehensive treatment of COPD patients and other chronic respiratory diseases. Something more! In addition to including it, it is also necessary to create opportunities for long-term access.

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