## KNOWLEDGE – International Journal Vol. 40.5

# HEALTH CARE, EDUCATION AND TREATMENT OF PATIENTS WITH TUBERCULOSIS

#### Natasha Artinova

Faculty of Medical Sciences, University "Goce Delchev" Stip, N. Macedonia, artinova.n@hotmail.com>, Gordana Panova

Faculty of Medical Sciences, University "Goce Delchev" Stip, N. Macedonia, gordana.panova@ugd.edu.mk

Abstract: Tuberculosis is a chronic infection disease caused by infection with tubercle bacteria (Mycobacterium tuberculosis). It is usually localized in the lungs, but can be spread to any organ or tissue in the human body. In 2018 the world has registered 10 million patients, 1,5 million deaths from this disease including 251 000 deaths due to TB disease in HIV positive individuals. The disease is transmitted through the air, when people with TB cough, sneeze or talk. General symptoms are: loss of appetite, weakening, malaise, night sweats, cough, sometimes with blood in the spleen, elevated body temperature. For diagnosis, microbiological and biochemical investigations, radiological examination, chest computed tomography and ultrasonography are performed. The microbiological diagnosis is based on two basic methods, microscopy and culture, which enable detection of tuberculous bacillus in clinical specimens. BCG vaccine is used as a preventive measure against tuberculosis. There are effective antituberculotic drugs that can successfully treat tuberculosis. Health education and care of TB patients is being carried out in order to reduce the obstacles for TB treatment, increase co-operation in relation to TB treatment, reduce the risk of transmission of TB infection.

Keywords: Tuberculosis, transmission, diagnosis, education, health care

#### 1. INTRODUCTION

The terms health care and caring are directly related to nursing and they exist since the emergence of mankind. The basic outlines of nursing as a profession and a nurse figure were laid out by the first nurse Florence Nightingale, who for this purpose possessed the necessary altruism and love for people. She says that it is not enough to be a woman, and to be a good nurse, because health care is a whole discipline, different from medicine and medical practice, which includes knowledge, skills, attitudes, systematics and logic that can only obtain through regular institutional education. We can freely say that her thinking has laid the foundation for health care.

Health care is a basic discipline in the practice of the nurse that aims to study and nurture health, prevent disease and alleviate suffering. But of course, the nurse has an indispensable role in educating, diagnosing and treating the sick too.

Health professionals (doctors, nurses) play an important role in the health education of the population and are part of their tasks for preserving and promoting human health.

Medical education has an important role in patient endurance and co-operation during the treatment. Getting to know the disease, how it spreads, diagnoses, treats and protects the near and distant environment is important information that supports the treatment.

Education achieves: acquiring basic knowledge of the disease, motivating to persist in treatment, increasing the self-awareness of the patient to prevent the spread of the disease, behavior change in terms of healthy hygiene habits, psychological adaptation, acceptance of the disease and preventing chronic complications.

The process of health care and education encourages the nurse to permanent improvement. Applying the process puts the nurse in the face of many challenges and temptations when deciding what, how, when, by what means, how to prevent, reduce, or solve a problem. Thus the process has a positive effect on the development of the nurse's personality.

## 2. AIM OF THE RESEARCH

Aims of the research, besides the examination of TB patients in the Republic of North Macedonia in the past years, is the importance of education and care of these patients in the treatment and easier overcoming of this infectious disease. Besides early diagnosis of tuberculosis and adequate treatment, care, proper nutrition, rehabilitation and education for the patients are important in the faster recovery of the patient, acceptance of the disease, and prevention of transmission of this infectious disease.

# KNOWLEDGE – International Journal Vol. 40.5

## 3. METHODS OF RESEARCH WORK

Statistics on the number of tuberculosis patients in Republic of N. Macedonia in recent years have been processed, taken from the Institute for Lung Diseases and Tuberculosis – Skopje. In addition to modern diagnostics and adequate treatment, methods used for health care and education of patients treated for tuberculosis are outlined.

#### 4. RESULTS AND DISCUSSION

Situation in Republic of N. Macedonia based of statistics taken from the Institute for Lung Diseases and Tuberculosis - Skopje, which is located within the Clinical Center "Mother Teresa". The results are taken using a descriptive method and are tabulated.

Table number 1. Results are taken using a descriptive method and are tabulated

Year	Newly infected	Relapse	Treatment failure	Treatment after discontinuation	The rest	Total
2012	319	26	4	6	0	355
2013	290	28	3	2	0	323
2014	261	23	0	1	0	285
2015	261	21	1	1	0	284
2016	243	20	3	1	0	267
2017	196	19	1	2	0	218
2018	201	14	0	0	1	216

Situation in the Republic of N. Macedonia on the basis of statistics taken from the Institute for Lung Diseases and Tuberculosis - Skopje.

In the Republic of N. Macedonia in 2012 are registered total of 355 TB cases, of which 213 were male and 142 were female.

In 2013, a total of 323 TB cases were registered, 219 of which were male and 104 female.

In 2014, a total of 285 TB cases were registered, of which 182 were male and 103 were female.

In 2015, a total of 284 TB cases were registered, of which 176 were male and 108 were female.

In 2016, a total of 267 TB cases were registered, of which 169 were male and 98 were female.

In 2017, a total of 218 TB cases were registered, of which 142 were male and 76 were female.

In 2018, a total of 216 TB cases were registered, of which 142 were male and 74 were female.

According to epidemiological data, the number of newly registered tuberculosis patients in the Republic of N. Macedonia in recent years, has a tendency of permanent decline.

### 5. CONCLUSION

Tuberculosis is a chronic infectious disease with the most common localization in the lungs. According to age distribution, it is most common in middle-aged (productive) people. One of the reasons that contribute to the distribution of tuberculosis is the frequent endogenous reactivation of the causative agent, conditioned by decreased immunity and associated chronic diseases. Health care through its evolutionary development of theory and practice has built its principles, which for us nurses should be the alphabet and guide in our work.

In the Republic of N. Macedonia in 2012 are registered a total of 355 TB cases, 213 of which were male and 142 female, in 2013 a total of 323 TB cases were registered, of which 219 were male and 104 were female, 2014 registered total of 285 TB cases, of which 182 were male and 103 were female, 2015 a total of 284 TB cases were registered, of which 176 were male and 108 were female, 2016 total 267 TB cases, of which 169 were male and 98 female, in 2017 a total of 218 cases were registered, of which 142 were male and 76 female, in 2018 a total of 216 TB cases were registered, of which 142 male and 74 female.

In addition to early diagnosis and appropriate treatment, care, education, adequate nutrition and rehabilitation are essential to reduce transmission and the number of tuberculosis patients. According to epidemiological data, the number of newly registered tuberculosis patients in the Republic of North Macedonia, in recent years, has a tendency of permanent decline.

## REFERENCES

Панова, Г., & Велкоска Накова, В. (2014). "Практикум по нега на болен", Штип Рудиќ, Р., Коцев, Н., & Мунќан Б. (2005). Процес на здравствене неге, ВМШ Београд

## KNOWLEDGE – International Journal Vol. 40.5

Крофтон, Џ., Хорн, Н., & Милер, Ф. (2000). Клиничка туберкулоза, IUATLD (1995). Сестринството во акција, Регинално биро на ICN за Европа, Копенхаген Талевски, С., (2008). "Туберкулоза дијагноза, лекување и превенција" прирачник, Скопје International Council of Nurses (2005). TB GUIDELINES for Nurses in the Care and Control of Tuberculosis and Multi-drug Resistant TB

Hednderson, V. (n.d.). Основни принципи на здравствената нега WHO TB REPORT, 2016. Global Tuberculosis Control. Surveillance, Planning, Financing (2004). Information, Education, Communication. KNCV Tuberculosis Foundation, Wolfheze Workshops <a href="https://www.who.int/tb/en/">https://www.who.int/tb/en/</a>