Epilepsy and Military Service

Epilepsi ve Askerlik

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Summary

The prevalence of epilepsy in Turkey was found to be 7 to 12.2 in 1000. If a mean prevalence of 10/1000 is accepted, according to the 2016 Turkish population census, there are about 134,000 epilepsy patients among men of military service age. Suitability for military service of epilepsy patients who are obliged to serve is determined by the Turkish Armed Forces, the Turkish Gendarmerie, and the Turkish Coast Guard Command Health Capability Ordinance (HCO). Men without disease or sequelae; or with disease or sequelae included in the “A” category of a list of diseases and sequelae are considered “fit for service.” Men with diseases or sequelae in the “B” and “D” categories are deemed “not fit for service.” Epilepsy disorders are reviewed in the 12th article of the HCO. In August 2016, military hospitals were assigned to the Ministry of Health. The authorization and responsibility to determine whether or not epilepsy patients and those with other disorders are fit for service now belongs to authorized hospitals affiliated with the Ministry of Health. The aim of this review was to offer some example templates as guidance to our colleagues performing this task.

Keywords: Epilepsy; legislation; military; seizure;

Özet


Anahtar sözcükler: Epilepsi; yasalar; askerlik; nöbet;

Introduction

In accordance with the Law No. 1111 on Military Service of Republic of Turkey, “All males who are living in the Republic of Turkey, are obliged to register with the military service in accordance with this law,” and therefore, the military service is a legal obligation for the whole nation. The age groups, who have this responsibility, have been determined in the relevant article of military service law: “The age to enlist has been set based upon the records in his basic citizenship register and begins on 1st January of the year when he reaches the age of 20 and ends on 1st January of the year when he reaches the age of 41, which mean it lasts 21 years. The military age is divided into three periods: the draft period, active service, and the reserve.”

According to the address-based population data of the Turkish Statistical Institute in December 2016, 40 million of the 79.8 million Turkish citizens are male. The total number of male population in the age range of 20–40 corresponds to 13.4 million people.
In studies, the prevalence of epilepsy in Turkey was found to be 7-12.2/1000.\[5–8\] If the average prevalence is considered as 10/1000, approximately 134,000 of the men, who are at the age of military service, are epilepsy patients based on the population data of 2016. On the other hand, the prevalence of psychogenic non-epileptic seizures (PNES) is estimated to be approximately 1/3000-1/50000.\[9\] According to this data, there are about 6500 epilepsy patients and 650-1300 PNES patients who apply for military service each year during the draft period. The number of patients with PNES can be increased during the military service period, because of the possible secondary gain for avoiding military duty.

Upon the some measures taken under the State of Emergency and the establishment of National Defense University, teaching hospitals, dispensaries and similar healthcare facilities, which are affiliated to the Gulhane Military Medical Academy within the Turkish Armed Forces (TSK) Health Command, and healthcare facilities of the General Command of Gendarmerie (GCG) have been transferred to the Ministry of Health (Public Hospitals Administration of Turkey) in accordance with the Article 107 of Decree Law No. 669 on Amendments in Several Laws as per Decision No. 2016/9109 regarding the Principles and Procedures for the Transfer of Gulhane Military Medical Academy and Military Hospitals, which was published in 17.08.2016 dated and 29804 numbered Official Gazette.\[10\] The medical examination of those who reached military [eligibility] age is first performed by the family physician, if any, in the place where the draft office is located, or by the single doctor in the nearest official health institution if the person does not have a registered family physician according to the 2016/9431 numbered “Turkish Armed Forces, General Command of Gendarmerie and Coast Guard Command Health Aptitude Regulation” (TSK, GCG, and CGC HAR) which was published in 11.11.2016 dated and 29885 numbered Official Gazette and as per Military Law No. 1111. Their complete physical examinations are performed and according to the results, healthy individuals and those, who are coded from the (A) section of the List of Diseases due to their diseases, are determined as “Eligible for Military Service”. Those, for whom a decision is not able to be made, and who declare their diseases or who need to have further investigations based on their physical examination findings, are directly referred to the nearest relevant healthcare facility, which is authorized to issue the disabled medical board report and affiliated to the Ministry of Health.\[11\] As it can be understood from this article, all neurologists employed in authorized healthcare facilities have the authority and the responsibility to decide whether those who reached military [eligibility] age are eligible for the military service or not. This review is written to give information about according to which rules this decision will be taken and how a report will be written.

**Turkish Armed Forces, General Command of Gendarmerie and Coast Guard Command Health Aptitude Regulation**

Military and civilian personnel employed in TSK, GCG, and CGC, determination of the eligibility of the citizens, who are obliged to fulfill the military service, for the duties in these institutions, healthcare related works to be performed in peace and war have been determined by the Health Aptitude Regulation (HAR).\[11\] According to Article 5 of this regulation, “those who reached military [eligibility] age are grouped as those who are eligible for the military service and those who are not eligible for the military service” in the draft period. People who are eligible for the military service are those who have no diseases and disorders, and those who are included in the “A” section of the list of diseases and disorders. People who are not eligible for the military service are those who have diseases or disorders identified in the “B and D” sections of the list of diseases and disorders.\[11\] Additionally, if non-commissioned officers and soldiers have the complaint of fainting or they declare it, they will be referred to relevant hospitals to get a decision on them.

Epilepsy and electroencephalography (EEG) abnormalities are specified in the Article 12 of the diseases and disorders section of HAR. In the subclause “A”, those who can do military service are specified. Those who reached military [eligibility] age, who are defined as epilepsy patients in the subclause “A”, and who will perform their military service, may use medicines related to their disease during the military service.

**Article 12 Subclause A:**

**Paragraph 1:** Mild paroxysmal diseases of the nervous system other than epilepsy (Headache without complications is considered to be healthy.).

**Paragraph 2:** Those whose clinical and laboratory findings are normal, but have significant findings in EEG (focal or generalized spike, sharp wave, complexes, focal or generalized slow activity) (Those who have no fainting history but have non-specific EEG abnormalities are considered to be healthy.)

**Paragraph 3:** Individuals with paroxysmal fainting, who have no specific EEG findings and for whom a definite epilepsy diagnosis is not able to make with anamnesis and clinical findings. The report content example is shown in Fig. 1.

**Paragraph 4:** Patients who have no specific EEG or imaging finding, but have rare seizures according to their anamnesis or medical documents.

Those who are included in subclause “B” are recalled to be evaluated for military service during the war, however, they do not do military service in peace.
**Article 12 Subclause B:**

Paragraph 1: All individuals with epileptic seizures, who are observed to have seizure by the neurologist and understood that it is epileptic according to the video recordings during the period of clinical observation. The report content example is shown in Fig. 2.

Paragraph 2: This paragraph has been amended as “Patients, whose anamnesis is compatible with epilepsy; who stated that they have been followed up and treated with the diagnosis of epilepsy; who are diagnosed with epilepsy with an approved report taken from an official healthcare institution, which gives the neurologist a definite opinion; and who are being followed up and treated. Remarks: The content of the report and the healthcare institution, in which the report is given, should be indicated in the medical report.” by the 2017/10844 numbered “Regulation on the Amendment on Turkish Armed Forces, General Command of Gendarmerie and Coast Guard Command Health Aptitude Regulation” which was published in 03.10.2017 dated and 30199 numbered Official Gazette. The report content example is shown in Fig. 3.

**Paragraph 3:** Patients whose anamnesis is in compatible with epilepsy and who have specific findings in their EEGs (multiple spike wave, frequent lateralized or generalized spike, sharp-slow wave complex).

In the subclause “C,” treatment and recovery of diseases and disorders specified in “A,” “B” and “D” sections are included, and the rest and treatment status of the persons are discussed. It includes those who will not do military service temporarily until the final decision is made. For instance, the deployment up to 3 years shall be applied, and the military service may be postponed until their medical status become certain for those who have been decided by his physician who stop the medication (those whose neurological examination is normal, cerebral imaging does not reveal any pathology that can cause epilepsy, who have seizure-free periods with drugs and no specific abnormality in EEG). Leaving the decision for next year should not be applied to every patient. It is an important issue which should be considered while making this decision.

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**Fig. 1.** Sample of A/12 F3 report content.

**Fig. 2.** Sample of B/12 F1 report content.

**Fig. 3.** Sample of B/12 F2 report content.

**Fig. 4.** Sample of C/12 report content.
If the patient’s condition is compatible with the “A,” “B” or “D” sections, it will not be appropriate to make “C” decision for this patient. As mentioned above, “C” decision only includes treatment and recovery status, and covers the interim period in which no decision is made with regard to the disease of the candidate. “C” decision must be taken without extending the period if the status of the patient is thought to became “A” from “A,” “B” from “B” or “D” from “D” after the deployment to next year. For instance, “C” decision is not appropriate for the candidate if there is no doubt that he is being followed up with the treatment-resistant epilepsy diagnosis in terms of both the history and the medical documents, and is currently followed with the dual antiepileptic drugs (AED) and underwent epilepsy surgery. In accordance with the HAR, a process will be applied for the patient according to the “D/12 F-1” section. The decision will not change when this patient is postponed for the next year. The report content example is shown in Fig. 4.

Those who included in “D” will not be taken to military service in war and peace.

Article 12 Subclause D:
Paragraph 1: Patients with drug-resistant epileptic seizures (those whose epileptic seizure is stimulated by the cardiazole activation are not considered epileptic).

As it can be understood from these articles, having epilepsy disease does not prevent individuals from doing military service. Each patient is evaluated separately, and decision should be taken according to the history, examination, EEG and imaging findings, and drug response. As determined by law, neurologists have to decide firstly whether the person at the military [eligibility] age with complaining of faint is a patient with epilepsy or not, and then, whether his condition is eligible to do his military duty in peace or in war if the person has epilepsy. In making this decision, legal and conscientious liability is also imposed in addition to the medical opinion.

Decision on Eligibility for Military Service

In general neurology practice, epilepsy is diagnosed by evaluating the history, examination and laboratory findings together. There must be supporting indicators in making decision for individuals at the military [eligibility] age with normal neurological examination. Laboratory findings are partially useful in diagnosis. Routine EEG is performed for each individual who are referred with the complaint of fainting. To increase the diagnostic accuracy, EEG studies should include activation methods such as opening-closing the eyes, hyperventilation and intermittent photic stimulation and in some cases, sleep deprivation as a standard. Activation methods can show specific findings in only 11% of EEG records. Routine EEG is not a gold standard for the differentiation of PNES from epileptic seizures, and the history may not provide reliable information.

The data such as prescriptions, files, reports showing the regular follow-ups of the patients, which were given by the centers where the patients are followed, and pictures or videos of the seizure that can be taken with the mobile phones provide guidance to neurologists working in authorized hospitals. The medical documents, which provide a definite diagnosis to the specialist doctor, can be used during the procedure according to the HAR. Unfortunately, it is not always possible to issue a document that can be shown as an official document during legal proceedings due to the work load density of all neurologists across the country. In order for the legal validity of the documents, the identification file of the patient (pictured if possible), the identification file of the physician (stamp and signature) and the diagnosis must be clear. Follow-up forms without the physician’s name, the copy of prescriptions without the stamp and the physician’s signature, single-line medication report including only the diagnosis such as epilepsy with no further information and the name of drug but not including any information about the patient’s follow-up, seizure observation (if any), the course and duration of disease may not be considered as competent. Neurologists, who make the diagnosis or issue the medication report in the documentation-based procedures, legally have the responsibility of making a diagnosis. For this reason, neurologists should consider these issues in preparing the documents, which may be used as legal documents in the future, for male patients at or before the age of military service.

Of course, many of those, who reached military [eligibility] age, go to the medical examination for the first time in the draft period and have no medical records due to the inadequacy of the health care system. These are common problems encountered in our country. In light with these information, about 6000 of the individuals, who apply for the military service, are epilepsy patients, and 600–1200 are PNES patients. Patients should be hospitalized to observe the seizures in cases where epilepsy and PNES cannot be differentiated in outpatient clinics with those methods and documents. The mean hospitalization for these patients ranges from 10 to 30 days. In the study, 75.5% of the patients were observed to have a seizure within the first 10 days. If possible, selected cases should be evaluated by video-EEG monitoring. Video-EEG monitoring is considered as the gold standard for the differential diagnosis of PNES and epilepsy. It is not always possible to perform video-EEG monitoring due to the tendency of PNES patients to have seizures out of the camera view, laboratory costs and personnel employment problems. It should also be kept in mind that there is no obligation for video-EEG monitoring in the HAR. If a definite decision can be reached through the current history, examination and laboratory support and the medical documents of the patient in accordance with the definitions specified in HAR, it would not be correct to refer these patients to an advanced center performing video-EEG monitoring. The definition of “Related Specialist” is equally defined as the authority to make decisions in the HAR, and every neurologist
is equally evaluated in making decisions within the scope of this regulation regardless their academic career. Maximum effort should be made to ensure that the procedures of 134,000 epilepsy patients at the age of military service should be completed by the neurologist who is referred first. Not making decisions when authorized and directing the patient to another center to make a decision require administrative responsibility considering that the transportation costs for the patient’s referral are covered by the state.

The purpose of these applications is to fulfill this duty which requires the medical, legal and conscientious responsibility. There should not be a claim as carrying out the necessary medical and administrative procedures by differentiating epilepsy and PNES with a hundred percent specificity and precision. It is aimed to apply the most accurate way in the light of the scientific data. It should be remembered that PNES and epilepsy association is seen by 10-50%, and difficulties are encountered particularly in the evaluation of these patients.\\[18,17\\]

### Reporting the Decision on Eligibility for Military Service

Information on reporting the decisions are written in detail in the Physical Examination Regulation of Turkish Armed Forces, General Command of Gendarmerie and Coast Guard Command. A brief information has been given below with regard to the relevant part of this regulation, and it is recommended to refer to the relevant regulation for detailed information.

“All personnel who will apply to the Health Board including those who reached military [eligibility] age (soldier subject to draft and referral, and presumptive nominee reserve officer subject to draft and referral) apply to the hospital with the referral letter issued by the relevant authorities” is written. The purpose of the examination of the personnel is specified in the referral letter by the authority issuing the letter. If definite action is taken for persons receiving inpatient treatment, it can also be done with a referral letter without a photograph provided that the identity card is submitted. Referral of the non-commissioned officers/soldiers and those who reached military [eligibility] age are done with the signed and photographed referral letter (with sealed/cold stamped and adhesive acetate) where Turkish ID number is written. The photocopied photos cannot be used in the Health Board process. If the photo taken by webcam is used, it should completely identify the person and should be 25x32 mm in size. There is no need for acetate in photos taken with webcam.\\[18\\] As it can be understood from this directive, information need to be written on the referral sheet of the person at the military [eligibility] age, who is referred for a decision, and purpose of the examination are specified. The procedure must be started by checking the referral sheet in the admission, and the decision must also be in response to the cause of the referral.\\[15\\] Additionally, the identity card of the candidate is evaluated carefully from the beginning to the end of the military service. The importance of evaluating that whether the referred person is the same person with the individual, who was examined, received EEG and appeared before the board is also emphasized repeatedly. It is known that the EEGs of the patients with epilepsy was performed and ineligibility decision was made for individuals who did not have any diseases without performing an identity check for healthy individuals. Responsibility always belongs to the physician, who issues the health board report. Therefore, this issue should be addressed carefully.

It is necessary to prepare the appropriate report after a decision is made for the person who reached military [eligibility] age and non-commissioned officers and soldiers. Those at the military [eligibility] age, who are needed to be examined by an expert physician in the military draft examination, are directed to the authorized healthcare facilities designated by the Ministry of Health. From these individuals, who reached military [eligibility] age, non-commissioned officers and soldiers referred from military unit and draft offices;

According to the HAR, decision on those, to whom “Eligible for Military Service” decision will be taken, can be made with the decision of the relevant physician(s) and with the approval of the head physician. The medical reports of the individuals, who will be examined by the Health board, are written in the examination sheet. The followings are written in the Health Board report; the name of the hospital where the examination is performed, the date and the number of the report, acceptance and discharge dates, hospitalization duration, clinic directed to the board, authority referring for examination, date of the referral of this authority as well as the Turkish ID number of the individual, height and weight measured in the presence of the delegation, open personal records, military unit information, class, force, status and rank, for what purpose he is sent to the examination, what number of Health Board process, what is its purpose, address and domestic draft office. The report of the related clinic is written in detail in the findings section of the report.

1. The date and the protocol number are specified in the report. The report begins with brief ID information of the person (how many months they have been in the armed forces is written for non-commissioned officers and soldiers).
2. The number of the Health Board process, the date and the number of previous reports, the diagnoses and the decisions in the reports are indicated.
3. The complaints about the disease causing the person to have the delegation process, the history, the medical and family history, and the examination findings are explained. The report is concluded after the laboratory findings supporting the diagnosis of disease, surgical information (if any), and clinical decision have been written, and signed by the physician.

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Reports of laboratory branches for disease-related examinations are written with the protocol number below the clinical report, and the relevant laboratory report is signed by the branch specialist or authorized physician. If there are any reports or examination results received from another hospital other than the hospital performing the Health Board process, these will be specified in the findings section with the protocol number, date and identification information of the issuing physician. No procedure should be performed for those who do not have the approval of the chief surgeon or the responsible manager. The diagnosis and the decision are written in accordance with the relevant regulations and directives.[11,18]

In this article, guidance was aimed to be provided for the neurologists particularly about which issues they should pay attention to, and the decision mechanisms and processes were explained for them to make more accurate, faster and more reliable decisions in epilepsy patients since the authority and responsibility to act for those who are at the age of military service have been transferred to the authorized hospitals of the Ministry of Health with the transfer of military hospitals to the Ministry of Health. The subject of military service and epilepsy has always been solved in the military hospitals under an administrative burden that they know, but are more likely to make mistakes due to lack of practice.

In this manuscript, we aimed to inform neurologists particularly about which issues they should pay attention to, and the decision mechanisms and processes were explained for them to make more accurate, faster and more reliable decisions in epilepsy patients. The decisions are made in accordance with the relevant regulations and directives.[11,18]

It should always be kept in mind that the assumption that the reports related to the military service can be used by the military people for the malicious purposes may be more than the other administrative reports regardless the level of experience and knowledge.