prior to the time of actual conscription to military service.
Subjects and Methods: In the first part of the study, 457 recruits who came to do their military service in 1993 were examined; 47 of them (10.3%) failed to do their conscript service. Of the 2,402 conscripts who wished to interrupt their compulsory military service and continue conscription as civil alternative service in 1994, 24 also were studied. All 457 recruits and the 24 who went to civil service from their unit, completed the short form of the MMPI depression subscale, which consist 22 items.
Results: The failure rate of the recruits was 10%; the reasons for their failure were psychiatric in 81% and somatic in 19%. Of the 22 items in the MMPI depression subscale, 19 were connected statistically to failure. When a recruit gave six or more risk answers, he had >8 times chance that his service would be interrupted. The depression status of those who applied to civil service resembled that of those whose service was interrupted due medical reasons. The civil servists were even more depressed than were those who failed.
Conclusion: This study emphasizes the importance of adequate classification of fitness for service. The better the classification, the less the rate of failure, the less individual suffering, and the less the waste of training capacity. It is better to both the conscript and the military to exempt unsuitable men from military service.
Keywords: civil service; classification; conscripts; depression; exemption; failure; military service; MMPI; prediction
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Accidents and Sleepiness in a Military Setting

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Introduction: Human error has been identified as the root cause of the majority of accidents in virtually every industry examined. Agencies that compile accident statistics probably underestimate sleepiness and fatigue as contributors to accidents. There is a lack of scientific awareness in the way sleep and circadian rhythms may control alertness and performance. Work regulations that permit prolonged and dangerous schedules in which sleep is sacrificed for expediency and performance, further exacerbate the safety problem. The consequences of human error due to fatigue potentially are more serious now than before. A number of factors may contribute to sleep deprivation, and accumulated sleep deprivation can have serious consequences for performance. Sleep deprivation is characteristic of schedules that involve prolonged wakefulness, either chronic or intermittent, as well as work that is extended for many days without an opportunity for recovery and sleep. Sleepiness has been documented to impair performance, such as in causing the subject to doze off periodically. The ability to be vigilant visually and react quickly degrades as sleepiness increases. Military settings provide the most important knowledge about sleep and safety. Soldiers are subjected to long work hours, and they handle heavy equipment as well as potentially dangerous material. It has been observed that in peacekeeping operations, soldiers work long hours and are under pressure to perform in situations in which safety regulations may be inadequate and result in serious accidents.
Methods: Sleepiness was measured with the Multiple Sleep Latency Test (MSLT). Sleep latency in sets of <5 minutes constitute an increased propensity to fall asleep unintentionally. The use of MSLT tests during active peacekeeping service almost are non-existent. However, during the last 20 years, some observations have been made concerning fatigue and accidents in Norwegian soldiers. Annually, about four casualties have been registered of which some were due directly to human error and fatigue resulting from sleep deprivation.
Results: Four incidents will be presented, each analysing relationship between sleep loss and its consequences.
Conclusion: Sleep loss and sleep deprivation during peacekeeping operations resulting in fatigue may jeopardise optimal functioning of military personnel who otherwise are in good health. It is imperative that military planners pay attention to adequate sleep schedules and sleep conditions in order to prevent fatigue. Each soldier must be aware of the hazards of duty if he is not fully alert and awake. Mechanical devices that monitor sleep/wakefulness are available, and they may be of value for signaling to each individual when he is in danger of falling asleep unintentionally.
Keywords: accidents; error, human; fatigue; military; Multiple Sleep Latency Test; peacekeeping; performance; safety; sleep
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Early Treatment with Hydrocortisone and/or U0126 Inhibits the Synthesis of Reactive Oxygen Species (ROS) after Gunshot Injuries in Pigs

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Introduction: Several external stimuli, including trauma, increase the endogenous production of reactive oxygen species (ROS). These substances spontaneously attack proteins, nucleic acids, lipids, and other important biological molecules. In addition to their direct toxic effects, several pro-inflammatory signalling cascades are induced. The MAP-kinase cascade is a key system in which extracellular signals are transformed into intracellular responses. The purpose of this study was to investigate how the production of ROS is influenced by corticosteroids. The mechanisms for activating granulocytes, especially the importance of extracellular-signal-regulated kinase (ERK), also were investigated.
Material and Methods: The study was done as part of a training course in war surgery organised by the Norwegian Defense Medical Headquarter at Lahaugmoen Camp. Seventeen pigs (45–55 kgs) were used for the experiments. During general anesthesia, the left femoral artery was exposed and catheterized for blood analysis and for monitoring purposes. The animals were brought to the shooting range and exposed to a standardized insult: one gunshot hitting the right femur from a distance of 25m, and one pistol shot to the left upper abdomen from close range. First-aid treatment was instituted, and the animals were transported to a nearby field hospital for surgery. The animals were randomized into two groups. Group I (n = 9) received hydrocortisone 250mg IV, and Group II (n = 8) received a similar IV injection of saline. The injection was given 5 min after the last shot. Blood samples were drawn before the shooting (baseline = 100%), immediately after the hydrocortisone was given, and 60 min after the shooting. Circulating granulocytes were isolated, and the production of ROS was measured by a fluorometric method. Granulocytes from nine randomly chosen animals (5 from Group I and 4 from Group II) were treated in vitro with the ERK inhibitor U0126.