

## The Factors Affecting Trauma Rates

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### Abstract

**Rationale:** Many deaths and economic losses occur due to accident suicide and criminal causes in the world. Whether these events can be reduced with the systematic rules of healthy living is an important problem that needs to be addressed.

**Aim:** To reveal the relationship between accident, suicide and criminal death rates and unhealthy life in the world, and to examine whether the death rates and economic losses related to this can be reduced and to increase awareness.

**Method:** Worldwide accident, suicide and criminal death rates and economic losses have been revealed. The physical, mental and social problems leading to these events are examined and the literature is reviewed.

**Result:** According to the results of our study; It seems obvious that accidents, homicides and suicides may decrease significantly in deaths and economic losses when applying healthy living rules.

**Conclusion:** In order to reduce accident, suicide and criminal deaths and economic losses, as well as accelerating the works to raise awareness towards the application of healthy living rules in the society, we also think that governments should allocate more funds for research on this subject.

**Keywords:** Accident; Health; Murder; Suicide

### Introduction

According to data from 2014 by the World Health Organization, in the world, 5 million people die every year due to accidents, murder and suicide. Every six seconds someone in the world dies as a result of an injury [1]. About a quarter of these deaths are due to murder and suicide. Five times as many people die from homicide each year than from war related injury [2]. Also, there is an economic loss of 1.8 trillion dollars every year due to accidents [3]. According to WHO data, approximately 57 million people died in 2015 [4]. Worldwide accidents, suicide and criminal deaths account for 9% of total deaths in the world [2].

Health, according to the definition of WHO; it is the physical, mental and social well-being of man, and having no illness and defect [5].

- The most important rules of healthy life are as follows [6].
- Drinking sufficient and high quality water,

- Relieve stress,
- Adequate and balanced nutrition,
- Staying away from harmful habits,
- Regular and satisfying sex,
- Regular sleep,
- Having the ideal weight,
- Acting adequately,
- Participate in regular check-up programs.

Obvious deaths occurring every day in the world are due to physical, social and mental disorders. The reason for our study is that some of these deaths can be prevented and economic losses can be reduced by meeting healthy living conditions. The purpose of our study; to reveal the relationship between accident, suicide and criminal death rates and unhealthy life in the world, and when these conditions are fulfilled by statistically projection to show that mortality rates can be reduced accordingly.

## Method

Worldwide accident, suicide and criminal death rates and economic losses have been revealed. The physical, mental and social problems leading to these events are examined and the literature is reviewed.

## Results

According to the results of our study; It seems obvious that accidents, homicides and suicides may decrease significantly in deaths and economic losses when applying healthy living rules.

## Discussion

The healthy living conditions listed below are widely applicable in daily life. When these rules are applied, they can reduce the rate of incident, suicide and murder incidents as follows:

### Drinking enough and high quality water

When you drink enough healthy water; blood pressure and circulation are regulated, toxins-harmful chemicals in the body are quickly excreted. Body resistance rises. The activity increases. By providing the water in the healthiest way; vascular occlusion, which is the biggest cause of sudden death and strokes, is prevented. Being dehydrated in the brain causes restlessness and agitation [7]. When you drink enough water; the desire to drink alcoholic beverages decreases. So; rates of committing crimes, accidents or suicides due to drinking alcohol are reduced. When enough water is consumed, hormones that give happiness from the body are secreted. So; accidents, murders, aggressions and suicidal tendencies can decrease significantly. When enough water is drunk; blood pressure drops - related accidents can be prevented.

### Relieve stress

A stressed person; is like a grenade ready to explode. Stressed person is aggressive. It has a low tolerance to criticism. There is considerable distraction. Therefore stress; is one of the most important factor in accident, murder and suicide and also in the processing of many crimes [8,9].

### How can we relieve the stress?

The most natural and healthy ways to relieve stress are: getting hobbies, traveling, doing social activities, sports, listening to music or playing musical instruments, having sex, shopping, reading books, summarize; is to do all kinds of healthy and natural activities that your life desires.

### Adequate and balanced nutrition

People who do not have adequate and balanced nutrition, deficiencies of some nutrients that makes the person restless,

stressed. It reduces the ability to detect. Depression may be involved. There may be an increase or decrease in blood pressure due to nutritional disorders. Lithium deficiency in nutrition may increase suicide rates [10]. An increase in serum lipid levels may increase suicidal tendency [11,12]. Suicidal tendency has been reported to be increased in patients with high serum ghelin and cholesterol [13]. Adequate and balanced nutrition; enough in the foods taken daily; It means the presence of pulp (fiber), protein, fat, carbohydrate, vitamins and minerals.

### Avoiding harmful habits

Harmful habits (smoking, alcohol, drugs, stimulants, etc.); are the most important factors that negatively affect the physical, mental and social health of people. Alcohol is one of the most important causes of accidents, murders, suicide, and crime in the world. So; The person who does not dare to commit murder, commit suicide, theft, commit many other crimes becomes ready to do these actions after consuming these harmful substances [14,15]. In people who drink more alcohol; physical and psychological disorders such as distraction, decreased reflexes, impaired concentration, obsessions, aggression, vision-hearing disorders, imbalance, blood pressure changes, etc. occur. Depending on this; accident and crime rates increase significantly [16]. In alcohol dependence, the patient goes into a "absence" crisis when he cannot drink alcohol. It can harm themselves and their surroundings. Cigarettes contain approximately 3000 types of harmful-toxic substances. It creates addiction in the person. Vascular occlusion in smokers; 100 times more than others. Sudden blockages of the heart and brain vessels can lead to sudden death and accidents. A study in Taiwan has shown that smokers are much more likely to have a fatal accident [17]. Deficiencies due to the failure of that specific organ to feed in partial vascular occlusions; leads to dysfunction of the organ, in this case various mental and physical problems. For example, the most important cause of erectile dysfunction and related impotence in men: is the obstruction of the vessels going to the penis. Impotence in men; It is one of the causes of suicide [18]. Drugs and stimulants, acting just like alcohol; It increases the rates of accident, murder and suicide, as well as the rates of the processing of a wide variety of crimes. Alcohol, drugs or stimulants have been found to affect more than 50% of murders [19].

### Regular and satisfying sex

Regular and satisfying sex is one of the most important conditions of healthy life. With regular and satisfying sex, endorphins that produce happiness in the body are secreted [20]. The body releases its excess energy. So people who have regular sex; they become more peaceful, happy, comfortable. Their tolerance to all kinds of stress increases. Their aggression impulses are reduced. Thus, accident, suicide, and crime rates are significantly reduced.

### Regular sleep

In a study conducted in the USA, the risk of accidents was found to be higher in those with insomnia [21]. Adequate and comfortable sleepers are more comfortable, attentive and peaceful [22]. Their tolerance to stress is high. Their reflexes and performances are excellent. Therefore, the crime rates related to accident, suicide, and aggression are much lower in these people.

### Having ideal weight

Obesity; As well as the accelerator of many physical diseases, it causes a wide range of mental and social problems. In many obese people; There are serious problems such as depression, a life away from society, lack of self-confidence. Accordingly, in obese people; accident and suicide rates are higher [23].

### Acting adequately

When we move enough; blood circulation increases, happiness hormones called “endorphins” are secreted from the body [24]. Mobility is one of the healthiest and most natural ways to relieve stress. Apart from the physical health of people who do enough sports, their mental health is also excellent. Their self-esteem elevates, reflexes accelerates, attention span increases. The bones harden, their durability increases. Depending on all these; rates of violence, accident, suicide, and crime are reduced [25]. It is less affected by all kinds of trauma.

### Participate in regular check-up programs

Early diagnosis; it makes it possible to successfully cure many important diseases. Many diseases with delayed diagnosis; leads to the early death of people. Some undiagnosed diseases cause accidents and trauma. For example, if the person who has unrecognized mental illness is driving a vehicle due to a lack of attention and concentration, an accident can occur and traumas can lead the person until death.

If the patient has diabetes and is not aware of it; hyperglycemia or hypoglycemia can lead to accidents. Therefore, having regular health checks is one of the most important rules of healthy life; It is also of great importance in the prevention of accidents and traumas.

Charles Joseph Whitman was a quiet man on his own who was a guard in a prison in America. Whitman went to the prison's observation tower on 1 August 1966 and killed 17 people with a rifle. Realizing the changes in his psychology before this incident, Whitman, in his note he left the day before, made a will to autopsy himself after his death.

At autopsy, a brain tumor was detected in an area that would affect their behavior [26]. Charles Austin, who previously had a very moderate personality structure, if attended regular check-

up programs a few months before committing these murders, he could get his tumor treated, and perhaps so many people would not die. There are publications showing that T3 hormone levels are significantly higher in those who commit crime related to aggression compared to the controlled group [27]. When high T3 levels are detected with early diagnosis in these people, it will be possible to perform the necessary treatments and prevent aggression-related crimes.

### Conclusion

In order to reduce accident, suicide and criminal deaths; accelerating the works to raise awareness towards the application of healthy living rules in the society, we think that governments should allocate more funds for research on this subject.

### References

1. Injuries violence the facts-World Health Organization 2014.
2. Global Study on Homicide 2019 -United Nations Office on Drugs and Crime.
3. Chen S, Kuhn M, Prettnner K, Bloom DE (2019) The global macroeconomic burden of road injuries: estimates and projections for 166 countries. *The Lancet Planetary Health* 3: 390-398.
4. Hannah Ritchy: How many people die and how many are born each year? Our World in Data. September .11.2019. [ourworldindata.org › births-and-deaths](https://ourworldindata.org/births-and-deaths).
5. World Health Organization. Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June 1946.
6. Hasan Acar MD “Healthy life conference” GİRNE American University Senate Hall. May 10.2019.
7. Patel AV, Mihalik JP, Notebaert AJ, Guskiewicz KM, Prentice WE (2007) Neuropsychological performance, postural stability and symptoms after dehydration. *J Athl Train* 42: 66-75.
8. Felson RB (1992) Kick ‘em when they’re down’: Explanations of the relationship between stress and interpersonal aggression and violence. *The Sociological Quarterly* 33: 1-16.
9. Rosiek A, Rosiek-Kryszewska A, Leksowski L, Leksowski K (2016) Chronic stress and suicidal thinking among medical students. *Int J Environ Res Public Health* 13: 212.
10. Giatakos O (2018) Is impulsivity in part a lithium deficiency state? *Psychiatriki* 29: 264-270.
11. Wu S, Ding Y, Wu F, Xie G, Hou J, et al. (2016) Serum lipid levels and suicidality: a meta-analysis of 65 epidemiological studies. *J Psychiatry Neurosci* 41: 56-69.
12. Freedman DS, Byers T, Barrett DH, Stroup NE, Eaker E, et al. (1987) Plasma lipid levels and psychologic characteristics in men. *Am J Epidemiol* 14: 507-517.
13. Atmaca M, Tezcan E, Parmaksız S, Saribas M, Özler S, et al. (2006) Serum ghrelin and cholesterol values and suicide attempters. *Neuropsychobiology* 54: 59-63.

14. Smith SM, Goodman RA, Thacker SB, Burton AH, Parsons JE, (1989) Alcohol and fatal injuries:temporal patterns.Am J Prev Med 5: 296-302.
15. Murdoch D, Pihl RO, Ross D (1990) Alcohol and crimes of violence:present issues. Int J Addict 25: 1065-1081.
16. Intimate partner violence and alcohol.World Health Organization.
17. Wen CP,Tsai SP,Cheng TY,Chan HT,Chung WS (2005) Excess injury mortality among smokers:a neglected tobacco hazard.Tobacco control 14: 128-132.
18. Adinkrah M (2012) Better than dishonored:Masculinity ans male suicidal behavior in contemporary Ghana.Social Science&Medicine 74: 474-481.
19. Fagan J (1993) Interactions Among Drugs,Alcohol and Violence. Health Affairs 12.
20. Rokade PB (2011) Release of Endomorphin Hormone and Its Effects on Our Body and Moods: A Review. International Conference on Chemical, Biological and Environment Sciences (ICCEBS'2011) Bangkok Dec.
21. Shahly V, Patricia A, Berglund MBA,Coulouruyat C (2012) The associations of insomnia with costly workplace accidents and errors. Results from the America Insomnia.Arch Gen Psychiatri 69: 1054-1063.
22. Lieberman HR, Bathalon GP, Falco CM, Kramer FM, Morgan CA, et al. (2005) Severe decrements in cognition function and mood induced by sleep loss, heat, dehydration, and undernutrition during simulated combat. Biol Psychiatry 57: 422-429.
23. Wagner B, Klinitzke G, Brahler E, Kersting A (2013) Extreme obesity is associated with suicidal behavior and suicide attempts in adults :results of a population based representantative sample. Depress Anxiety 30: 975-981.
24. Goldfarb AH, Jamurtas AZ (1997) Beta-Endorphin response to Exercise.Sports Medicine 24: 8-16.
25. Sacks DN,Yaacov S, Petscher C, Tenenbaum SG (2003) Aggression and violence in sport:Moving beyond the debate.Int J Sport Exerc Psychol 1: 167-179.
26. Lavergne, Gary M (1997) A Sniper in the Tower. Denton, Texas: University of North Texas Press 223.
27. Stalenheim EG, Knorring LV, Wide L (1998) Serum levels of thyroid hormones as biological markers in a Swedish forensic psychiatric population. Biological Psychiatry 43: 755-761.