

# Influence of Pulse Rate on Sleeping Time

Qadir MI , Ilyas M\*

Department of Cardiology, Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan

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## 2. Key words

Stopwatch; Sleeping time

## 1. Abstract

Objective of present study was to correlate pulse rate with sleeping time. In this study 200 students participated whose age was between 18-20. Pulse is rhythmic expansion and contraction of artery. Pulse rate increases with gradual increase in blood pressure. There were four options about sleeping time 8 to 9pm, 9 to 10pm, 10 to 11pm and 11 to 12pm. All the students answered this question influence of pulse rate on sleeping time. The significant P value was 0.05.

## 3. Introduction

Pulse is expansion of arteries. Different people have different pulse rate. Pulse rate varies from person to person. Heart rate can be determined by feeling pulse. Pulse is name of rhythmic expansion and contraction of artery as blood is forced through it. The regular contraction of heart can be felt where clump of arteries is close to skin. For example the area of wrist, groin, neck region and upper part of foot. The rise and fall in pulse rate vary from person to person in hypertension, anxiety, movement and exercise normally pulse rate is normal in adolescence in between 60 to 100 while 40 to 60 bpm heart rate in athletes. Pulse rate increases with gradual increase in blood pressure while skipped heart beat indicates low level of pulse.

Sleep is name of recruitment of brain and body parts. It affects metabolism of body and maintained by thermostat of body hypothalamus melatonin induced the sleep in human while human follow specific biological clock or circadian clock. Sleep plays pivotal role in proper functioning of mind the person who used to take 4 to 3 hours mostly suffers from memory loss problems, weight gain, hypersensitivity and size of sleep depends on age factor, health, state of nutrition, environmental condition. No need to think about sleep is wastage of time. Actually it perceives same level of attention as food in our life. A person who takes right amount of sleep they feel rested and performed in well manner in whole days activities it's a valid assumption given by researcher. Recommend duration of sleep and timing is different at population level stand point. At the same time physical exer-

tion and genetic influence on sleeping time. More sleep runs in many families due to hereditary material.

## 4. Material and Methods

Total 200 subjects were participated in this study. All of these given subjects were students of Bahauddin Zakariya University Multan Pakistan. Pulse rate was calculated by using proper method hold on your arm wrist of left hand and on stop watch after putting thumb on groove of wrist and feel pulsation and countdown heart beat by using stop watch. Normally the pulse rate in resting situation is 60 to 100. Total number of beats per minute is counted.

## 5. Project Design

Questionnaire was prepared to ask question related his/her sleeping time. Influence of pulse rate on sleeping time.

## 6. Statistical Analysis

Statistical analysis was performed by MS Excel.

**Table 1:** Influence of pulse rate on sleeping time

Mean± SD	Mean±SD	Mean±SD	Mean±SD
8 to 9pm	9 to 10pm	10 to 11pm	11 to 12pm
70.98±10.46	79.27±17.76	75.80±9.3	80.51±11.58

**Table 2:** Sleeping Time

8 to 9pm	9 to 10pm
70.98±10.46	79.27±9.32*

Significant value (p<0.05)

\*Corresponding Author (s): Mahnoor Ilyas, Department of Cardiology, Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan, Pakistan, E-mail: nooransari030@gmail.com

**Table 3:** Sleeping Time

9 to 10pm	10 to 11pm
79.27±9.32	75.80±9.3

Non significant value ( $p>0.05$ )

**Table 4:** Sleeping Times

10 to 11pm	11 to 12pm
75.80±9.3	80.51±11.5*

Significant value ( $p<0.05$ )

**Table 5:** Sleeping Times

8 to 9pm	11 to 12pm
70.98±10.46	80.51±11.5*

Significant value ( $p<0.05$ )

## 7. Result and Discussions

The student T test was used to calculate result 200 students participated in this study. There were four option about sleeping time 8 to 9pm, 9 to 10pm, 10 to 11pm and 11 to 12pm. All the student answered this question influence of pulse rate on sleeping times. The significant P value was 0.05. According to answer of students the calculated p value of student sleeping time 0.02, 0.05 and 0.001 three values are significant and one value is no significant 0.24 value.

## 8. Conclusion

It is concluded that pulse rate is influenced by sleeping time. Pulse rate at 8 to 9 pm is 70bpm, at 9-10pm 79bpm, at 10-11pm pulse rate is 75bpm and at 11-12pm calculated pulse rate is 80bpm.

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