

学位論文の要旨

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学位論文名 Factors Related to the Awakening Mood for Seventh-grade Students
in a Rural Area of Japan

発表雑誌名 International Medical Journal
(巻, 初頁～終頁, 年) (in press)

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論文内容の要旨

INTRODUCTION

Bad sleep behaviors are not good for the health of youths. Youths' negative mood when waking up occurs as a result of bad sleep. A negative awakening mood is related to decrease in both their concentration levels and children's academic ability, and increase sleepiness during the daytime. The awakening mood of children is closely related to their psychological problems. Especially, Seventh grade is a period of growth in which youths experience sudden physical and psychological changes. In addition, how to get along with their friends and parents also changes during this period. These changes influence both their behaviors and other psycho-social factors. However, few studies have investigated the influence of negative awakening mood on both the physical signs and the psycho-social factors among junior high school students.

The purpose of our study is to clarify what factors are related with negative feeling on awakening, especially physical signs and psycho-social factors, among seventh grade in a rural area of Japan.

MATERIALS AND METHODS

This present study design was a cross-sectional questionnaire study in A city, rural Japan. Subjects were all seventh-grade students in the junior high school during 2012 to 2014. The

consent forms and the questionnaires for this study were distributed by the class teachers. The students and their parents or guardians were asked to fill out the consent form. Of 588 subjects, 504 students (boys: 252, girls: 252) had eligible responses.

The questionnaires consisted of lifestyle and affection. The lifestyle questions had sleeping and breakfast. Concerning awakening moods, for the question, “I wake up feeling pleasant in the morning,” the subjects were divided into two groups, “positive awakening mood” and “negative awakening mood”. The questionnaire also asked subjects regarding their psycho-social characteristics, mainly affection for themselves and their family.

The study also used data from blood tests and physical examination in annual health checkups. Blood samples were drawn from an antecubital vein of fasting participants. For the blood test, the total cholesterol (T-CHO), high-density lipoprotein (HDL), low-density lipoprotein (LDL), and triglyceride (TG) in serum levels were measured enzymatically.

The comparisons between groups of students with positive awakening mood and negative awakening mood were examined using chi-squared tests or Student t-tests by gender. Multiple logistic regression analysis was used to assess the contribution of negative awakening mood to independent variables with statistical differences. For analysis software, the Statistical Package for the Social Sciences (SPSS Japan Inc., Version 12.0J, Tokyo, Japan) was used.

The study was approved by the Institutional Review Board in Faculty of Medicine, Shimane University.

RESULTS AND DISCUSSION

Among boys, the group with a negative awakening mood had later awakening times and ate breakfast less often, with statistical differences. Among girls, the group with a negative awakening mood significantly had later bedtimes, shorter sleeping times, and ate breakfast less often. By the data of biological parameters, there were no significant difference between the quality of awakening moods and all biological parameters in both gender. Then, compared with those boys with a positive awakening mood, boys with a negative awakening mood answered either “no” or “probably not” significantly more often to the questions, affection for themselves, having positive traits, affection for their family, and affection for their friends. For girls, the percentages of “no” and “probably not” were higher for all items in the group with a negative awakening mood than that in the group with a positive awakening mood group, which is similar to the boys. Although there were no relationships by feeling on awakening among boys by the multiple logistic regression analysis, only less affection for their friends was positively

associated with a negative feeling on awakening among girls.

Our study indicated relationships between a negative awakening mood and less affection for their friends among only girls. Not getting along with their friends is a big problem among female junior high school students. Students with negative awakening moods had lower affection for themselves and had lesser positive traits. Those who had a negative awakening mood tended to be unable to accept themselves affirmatively. Our results suggest that girls are more likely to encounter problems in their friendships than boys.


Our study also found the relationships between negative awakening moods and late sleeping time or a short sleeping time only among girls. It seems that a late sleeping bedtime leads to chronic sleep deprivation. The chronic sleep deprivation has an effect on a person's feelings of irritation. The irritation is related with less affection for their friends due to the chronic sleep deprivation after sleeping hours are reduced by late bed-in time. There is also a relationship between a negative awakening mood and skipping breakfast among both genders. The reasons for skipping breakfast may have shifted from time management to physical symptoms, reflecting the background for mental state. Thus, skipping breakfast may lead to an altered mental state, resulting to both an increased feeling of irritability and less affection for friend.

Our study could not find the relationship between awakening moods and each biological parameter in annual health check-ups. The awakening mood may be an indicator that shows a psychological state before it become evident as physical symptoms. This may suggest that improving lifestyle-related behaviors leads to not only decrease the risks for sleep disorders and depression but also being able to get along with friends.

CONCLUSION

In conclusion, we clarified that among seventh-grade students, those with a negative awakening mood tended to give negative responses to the psychosocial items in a rural Japan. Especially, there was a positive relationship between a negative awakening mood and less affection for friends among girls. We could not find the associations between awakening moods and biological parameters obtained during health check-ups. Our results suggest that improving their awakening mood may lead to having favorable friendships. We propose that improving lifestyle-related behaviors related to awakening moods contributes to their maintaining good physical and psychological health during adolescence.

論文審査及び最終試験又は学力の確認の結果の要旨

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論文審査の結果の要旨			
<p>起床気分不良は、身体的精神的悪影響を与えることが知られている。本研究は、地方在住の中学一年生を対象に起床気分不良に関連する要因を明らかにすることを目的として調査を行った。中学一年生は体格や生活環境に大きな変化のみられる年齢である。</p> <p>研究方法は横断的研究とし、島根県A中学校の一年生、2012-14年（9月と10月）の3年間の合計588名を対象に調査した。不同意およびデータ欠落者を除外して、504名のデータを解析した。調査項目は、自記式質問紙調査、血液検査、体格検査を行った。その結果、単純二群比較したところ、男子生徒では、起床気分不良を訴えた生徒では、起床時刻が遅く、朝食を抜くことが多く、家族を好きではない、自分には良いところがあまりないなど自己肯定感の低い傾向がみられた。さらに友達と仲良くできないと答えた生徒が有意に多かった。女子生徒でも、男子と同様の傾向であったが、多変量解析で、女子生徒では起床気分不良と友達と仲良くできないこととの正の関係がみられた。これは、男女間での悩みや自己肯定感の種類の違いも考えられる。起床気分がよく快適な学校生活を送るために、学校や家庭の現場で、良好な人間関係、自己肯定感、睡眠時間、起床時間、朝食摂取などに配慮した保健指導が望まれると結論づけられた。学位申請者は本研究に関連した知識、研究手法が一定水準あると認められた。</p>			
最終試験又は学力の確認の結果の要旨			
<p>申請者は、ある地方の一校区の中学一年生を対象に起床時の気分不良に関連する因子を検討した。本研究によって、生徒が快適な学校生活を送るための保健指導に役立つ情報が得られた。研究関連の知識もあると認めたので学位授与に値すると判断した。</p> <p style="text-align: right;">(主査 山口清次)</p> <p>申請者は、地方在住の生活環境や体格が激変する中学一年生を対象に、起床時の気分不良に関連する因子を横断的研究により検討し、成人対象の先行研究の結果との同様な点及び相違点等を示し、指導の意義を論じた。関連知識も豊富であり、学位授与に値すると判断した。</p> <p style="text-align: right;">(副査 大谷 浩)</p> <p>申請者は、出雲市のある中学1年生の起床時の気分不良に関連する要因を検討した。男子と女子で有意差のある事象が認められた。保健指導による生活改善が可能だろうという発表だった。関連知識も豊富で、質疑にも的確に答え、学位授与に値すると判断した。</p> <p style="text-align: right;">(副査：吉山裕規)</p>			

(備考) 要旨は、それぞれ400字程度とする。