the time. The data obtained from NSS will be useful to reduce time in bed (TIB) and prevent bedridden of home care patients. The purpose of this study is to clarify the actual data obtained from NSS compared with the sleep data obtained from Actiwatch (AW-L: Mini-Mitter Co.USA). This study received the approval of the ethics committee of our college. A male home care patient (73 years old) was studied for one week on March 2002. He is not able to walk by himself but able to change the positions on his bed. When he use the portable potty and to go out the day-care, he get up the bed supported by his wife. Activity pattern from NSS with remote control, sleep data from AW and Sleep diary (SD) were used for data collection. Line of the remote control system was connected between the laboratory of college and patient’s house by phone. Activity pattern analysis by NSS shows that he sometimes takes the sitting position on his bed and not a complete state of bedridden during daytime. Bed time (BT) and get up time (GUT) were not able to judge accurately, but they will be able to guess by reading the width of the change of activity level. Total activity score by AW did not see the correlation with activity level (AL) by NSS. And the correlation was not seen between the sleep efficiency either. However, the sleep data from AW can be calculated more accurately to use the data from NSS. These results indicate that using the data from NSS is useful not only clarify the sleep data of home care patient but also understanding the state of activity level. Using NSS with remote control will bring a good result to reduce TIB and to prevent bedridden of home care patients.

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Some consideration on relation among climate, air-conditioning and clothing surveyed in several places of Japan
Funatsu M. #, Maeda T. #, Suko E.#, Hirai Y#, Kobayashi H.###, Tanaka M. §§, Watanuki S. §§§, Yasukouch A. §§§
# Fukuoka Jo Gakuen Women’s University, Fukuoka, Japan § Fukushima Medical University, Fukushima, Japan
### Ishikawa prefectural nursing University §§ Fukushima College
§§§ University of Kyushu Institute of Design, Fukuoka, Japan

People have different manners using air-conditioning for controlling room temperature, since the climate is much different in southern and northern parts of Japan. It is usual recently most Japanese live under air-conditioning throughout the year. The changes of room temperature are considered to decrease all around the year and also locally. On the other hand, subtle temperature control in rooms can be possible due to better performance of air-conditioners. As the results, the local changes of cloth quantities are considered to grow smaller in number. We surveyed about the following items in order to clarify their regional differences: daily people’s residence time under air conditioning system in a day both in summer and in winter, types of available air conditioners and clothes, and heat feeling, etc. Survey areas are Hiroasaki city (at northern Japan), Fukushima city (at central Japan), Tokyo (facing the Pacific Ocean), Fukuoka city (facing the Sea of Japan). In these four cities, questionnaires were carried out since Dec. 7 to 21, 2001. The samples were 280 female students aged from 18 to 20. In the questionnaires every 30 minutes all through the day were described the following items: what type of heating they use, their thermal feeling under air-conditioning and what clothes they wear, etc. The thermal feeling under air-conditioning are classified 7 degrees. Operating time of heating are classified into four types. Type is lis 1, 2, 3 and 4 were 0–6 hrs, 7–12 h, 13–18 hrs, 19–24 h, respectively. Moreover skin temperature in summer was measured in Fukuoka.

Results: People lives with some heating environment, half a day or almost a whole day. In each region, Type3 was most, Type2 and Type4 were next. Regionally, Type2 and Type3 were major (from 50% to 62.5%) in Tokyo and Fukuoka. In Hiroasaki and Fukushima, Type2 and Type4 were major (from 70% to 75%).

A method for evaluating the masked obesity reserves in young Japanese females
Ishii M. #, Takahashi R. ###, Fukuoka Y. ###
# Fukuoka University of Education, Munakata, Japan
## Prefectural University of Kumamoto, Kumamoto, Japan

The purpose of this study is to evaluate a kind of obesity in young Japanese women who appear slender but wear relatively thick body fat (masked obesity). A new index (Masked obesity index, MOI) was induced from body mass index (BMI) and percent fat (%Fat), and the validity of MOI was assessed. Three hundred eighty-three university female students were the subjects of this study, in which the condition for obesity was defined as BMI larger than 24 and %Fat larger than 30%, and that for masked obesity was, as BMI larger than 24