

age and the certainty of death. How to spend one's terminal stage of life is an important consideration for every person.

Therefore, in this study, the necessity for educating people about the problems associated with death are considered along with changes in the caregiving process for the terminally ill. Two important reasons for the changes are considered : (1) People know less about the death process. People do not witness death as much as before because more people are dying in hospitals instead of at their homes. (2) In the past, treatment was determined by the doctor, but at present, patients have more say in the care they receive.

Development of Teaching Materials for Basic Rehabilitation Nursing Students Keiko SEKIDO and Ko UTSUMI

Rehabilitation nursing is one of the most important subjects in basic nursing education. However, it is a difficult subject for basic nursing students to understand. Therefore, teaching materials were developed for use in lectures. They consisted of three tables explaining the general function of body and mind and the nursing care to be used with patients who need rehabilitation.

The educational materials developed were very effective in enabling basic nursing students to understand rehabilitation nursing.

Evaluation of a Tele-Consultation System between Clinics and Hospitals Masaaki TANAKA and Yukiko UEMATSU

Our research team developed and implemented a tele-consultation system which electronically exchanges a patient's clinical data between a medical practitioner and a hospital specialist. Two months after the start of the experiment, we were able to assess the system by examining 17 clinical data exchanges completed by the system. The result showed that the average data length was 152KB, and the average number of images attached was 1.6. The average size of the image data was 169KB, which is 64KB per image.

Since the size of the image data file is large, it was compressed using the JPEG format. We also investigated the most suitable relationship between resolution of the image and the compression ratio. The size of image data increases in proportion to the square of the resolution. However, it was found that the compression ratio decreases with an increase of resolution. Since the JPEG compression is non-invertible, its efficiency for recovering original image data was examined. As a result, it was found that more than 90% of pixel data of the compressed image data differs in brightness by only 2 degrees or less from the original in the case of standard-compressed gray scale X-ray images at 96dpi, 256 degrees of brightness.

The dependency of transfer time on data amount was also investigated through E-mail experiments. We found that data of 200KB to 400KB size reaches the destination within about a minute. However, there were differences in transfer time depending on the day of the week or the time of day. In fact there was a case that took 45 minutes to transfer 100KB of data.

A Health Monitoring System for the Aged Living Alone (I)

Yoshimitsu SHINAGAWA, Tomohiro TANIGAWA, Katsuji NANBA and Shigeru OHTA

Because Japan has the longest life expectancy and lowest birthrate in the world, it is destined to become an extremely aged society. Therefore, many laboratories have done research on health monitoring systems