

Computers influence every sphere of human activity and bring in many changes in industry, education, health care, scientific research, social science, law and even in arts, music and painting. In India the impact of computer technology can be felt only in certain fields whereas in developed countries computers have become part of every man's life.

Although computers have been used in health care since 1960's, the use of computer by Nurses has increased rapidly in developed countries. Computers can perform a wide range of activities that save time and help Nurses provide quality nursing care.

USE OF COMPUTERS IN CLINICAL NURSING PRACTICE:

a) Admission, Discharge and Transfer (ADT)

ADT system allows Nurses to obtain basic biographical information on clients before they arrive to the unit.

When a discharge or transfer is entered in the computer, all the appropriate departments (Eg: dietary, house keeping, pharmacy) are automatically notified, thus, saving the Nurses from many phone calls. Information about beds and a client's location on the unit is also readily available.

b) Nursing Documentation:

Nursing assessments, clients' care plans, medication, administra-

tion records, nursing notes and discharge plans are some of the forms of Nursing documentation that are computerized. Computerized documentation has many advantages. It is typed and therefore legible. The computer can be programmed to identify the data and time of all entries as

well as the initials or the name of the person making the entry.

The computer can store standard nursing care plans in a format determined by the institution, to be used by Nurses as the basis for developing individualized client care plan. The computer is often programmed to automatically print a list of medication to be administered at pre determined times, during the day. A Nurse using a printout for a particular client, administers the medication and then charts it on the computer (If the medication is not charted and given within a specified time after the scheduled time, the computer prints a reminder that the medication is over due). Computer can perform drug dosage calculation faster and more accurately. Nurses' notes can be entered quickly by choosing statements, appropriate for a particular client from multiple pre programmed choices.

USE OF COMPUTERS IN NURSING EDUCATION:

Computer is a useful tool in Education because it allows for an individual a self paced learning. Computerized Assisted Instruction (CAI) is a method of teaching that involves interaction between the learner and the computer. The computer takes on the role of a teacher.

There are three different types of CAI programmes:

a) **Drill and Practice:** It is the most common and least complex type of CAI. A learner



is presented with a series of questions or problems about materials that have al-

ready been learnt. Drug dosage calculation, intravenous drip rate calculation and medical terminology and abbreviations are some of the topics that drill and practice CAT is well suited for.

b) **Tutorial Programs:** Display new materials that are similar to programmed instructions. Tutorials present information and provide the learner the feed back.

c) **Simulations:** Present before learners the 'real - life' situations that are designed to assist learners in developing problem solving and decision making skills in a safe environment. Interactive Video Instruction (IAV) can provide learners with "true-to-life" simulation. IAV combines CAI with a videotape or video-disc player so that video pictures as well as graphics can be incorporated in the design of the software.

NURSING RESEARCH:

Computers facilitate the research process in a number of ways. Computerized literature searches are a particular advantage to the researchers because they save time and can increase the scope of the search and the number of data base that can be searched. The computer can also



Author : Professor & Head,
College of Nursing, Kottayam, Kerala.
[at the time of writing this article]

help researchers collect and analyze data, prepare research reports, and disseminate research findings.

NURSING ADMINISTRATION:

Computers are useful tools for Nurse administrators. A number of computer programmes are designed to assist Nurse administrators. Computerized patients' classification system can be used to assign Nursing staff based on how severely ill clients are. Clients are assessed on a number of criteria and their abilities or need for Nursing care are rated. A client's total rating score indicates how much Nursing care the client requires. Computerized inventory system keeps track of supplies received and disbursed. They can also be integrated with the client billing system. General computer application software

such as word processing, electronic spread sheets and data based management system help Nurse administrator to prepare reports and letters, create budgets and maintain personnel records and mailing lists. Computers can calculate daily the number of Nurses needed on each unit, computer can be used to schedule Nurses' days off so that an optional number of Nurses are working at one time.

CONCLUSION:

Computers are an important tool in Nursing practice, Nursing education, Nursing research and Nursing administration.

Nurses can use computers in clinical practice to document nursing care, communicate physician's orders, receive and send information about admissions, discharge and

transfers, monitor clients and also receive lab test results.

BIBLIOGRAPHY

1. Diane. M. Billings, Judith. A. Halstead, Teaching in Nursing, A guide for the faculty - W.B. Saunders company, Philadelphia, 1998
2. K. Sampath, Introduction to educational Technology, 4th ed. Sterling publishers Ltd. 1998
3. NICOLL, Computers in Nursing, Nurses Guide to Internet -1997, C.V. Mosby Company, 1997.
4. S.L. SAM, Information Technology gyan Publishing House, New Delhi, 1999.



Announcing TNAI Workshop on Management Skills in Nursing Series XVI "Administration and Supervision for Effective Nursing Care" From September 11-18, 2002 At TNAI Headquarters, L-17, Green Park, New Delhi-110016

It is a pleasure to announce The Trained Nurses' Association of India's forthcoming National Workshop on 'Nursing Administration and Supervision for Effective Patient Care' during September 11-18, 2002 at TNAI Headquarters, L-17, Green Park, New Delhi-110016. The overall purpose of the workshop is to strengthen and enhance the administrative and supervisor skills of Nurse professionals working at various levels to enable them to provide effective Nursing Care.

* Request for registration will be considered on a first-cum-first-serve basis as there are only limited seats (40)
* All costs for attending the Workshop will be borne by the sponsoring authorities (institutions/governments) or by concerned individuals as the case may be.

* **Registration fee is Rs. 2000/- per participant**
(Kindly note the revised rate for the registration fee Rs.2000/- w.e.f. April 2002).

* Boarding and lodging, if desired, will be Rs.300 per day per participant.

* Local participants Rs.70 per day, per person (lunch and tea twice).

For Registration Forms, write to: The Coordinator (CEP), TNAI Headquarters, L-17, Green Park, New Delhi-110016.
Ph.:6566665, 6966873 Telefax: (011) 6858304 Email:tnai@ndf.vsnl.net.in along with the request for Registration Form, Kindly enclose a self addressed envelope (9"x4") with a postage stamp of Rs. 4 affixed. Last date for receiving filled Registration form is **September 7, 2002**. However, seats can be booked tentatively by phone/fax/telegram/Email.

Mrs. Sheila Seda

Assistant Secretary-cum-SNA Advisor, TNAI