



COURSE ON ELECTRONIC DATA PROCESSING
IN HEALTH SERVICES

Geneva, 25 May - 3 June 1970

EM/COURSE EDP-HS/3
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ELECTRONIC DATA PROCESSING IN HEALTH SERVICES
IN EASTERN MEDITERRANEAN REGION
(Result of a Questionnaire)

A questionnaire was sent to all fourteen participants in the Course, coming from nine countries in the Region, with the objective of providing background information concerning the status of electronic data processing in health services in their countries. No replies were received from the participants from Kuwait and Syria, yet information concerning Kuwait are included, based on a report by a WHO Consultant in electronic data processing.

Below is a summary of the answers received:

A. First, the participants were asked if they have, at present, a computer in the Ministry of Health in their countries. If the answer was NO, they were asked if the Ministry, at present, makes use of computers elsewhere.

1. Only in Iraq the Ministry of Health has its own computer.
2. In two countries they make use of computers elsewhere: in Lebanon, in another Ministry; and in UAR, in a semi-governmental agency.
3. In Kuwait, Sudan and UAR, collection and/or processing of vital and health statistical data are the responsibility of governmental agencies other than the Ministry of Health, and these agencies have their own computers.
4. Iran, Jordan and Pakistan are not, at present, making use of computer facilities in health services.

B. Then the participants were asked to provide information on the computer(s) now being used.

The data are presented in the following page.

DETAILED INFORMATION ON THE COMPUTERS USED AT PRESENT
IN PROCESSING OF VITAL AND HEALTH STATISTICAL DATA
IN FIVE COUNTRIES OF THE REGION

Item	Iraq	Kuwait	Lebanon	Sudan	UAR
Year installed	...	1966	1969	1968	1966
Type and model	IBM 1130	IBM 360	IBM 360/20	IBM 360/20	IBM 1401
Input	IBM 1442 card read/punch	...	Cards, tapes, discs	...	IBM 1402 card read/punch & 6 tapes 7330
Output	IBM 1132 printer 80-110 l.p.m.	...	Printer 230-260 l.m.p.	...	IBM 1403 printer 600 l.p.m.
Storage	4096 or 8192 16 bit-word	...	16 000 memory positions, 2.7 millions bit/sec.	...	8 K
Average running time	6 h. daily	...	100 h./month	4 h. daily	12 h. daily (2 shifts)
Maintenance	No contract	...	By company once/m.	By company	By company
Staff	2 college graduates	2 systems analysts 8 programmers 27 supporting staff	1 programmer 1 chief operator 2 operators	3 trainee programmers 6 are taking training course	8 programmers and Systems analysts 30 conventional machine operators
Field in public health services where computer is used	Morbidity and mortality statistics	Vital statistics	Storage of drugs	Vital statistics	Hospital statistics and field surveys

C. The participants were also asked about computers available in their countries, so as to know the possibilities of assistance in electronic data processing if required. The replies were as follows:

Country	In Government	In non-governmental agencies
Iran	4	1
Iraq	6 (including 1 IBM 1130)	1
Jordan	1 (IBM 360/20)	1 (IBM 360/20)
Kuwait	... (at least 1 IBM 360)	...
Lebanon	4, including: 1 IBM 360/20 1 Bull, G.E. 810	4
Pakistan	At present: 1 IBM 1401 1 IBM 1130 2 IBM 360/30 1 IBM 1620 1 ICL 1902 Already on order: 1 IBM 360/20 1 IBM 360/30 1 IBM 360/40 1 IBM 360/50 1 ICL 1902	At present: 5 IBM 1401 2 IBM 360/40 3 ICL 1902 Already on order: 2 IBM 1401
Sudan	3 (including 1 IBM 360/20)	None
UAR

D. Lastly, there was a question concerning the prospects of installing a computer for use by the Ministry of Health. As expressed by the participants:

Iran: The matter is under study.

Iraq: Plan to make more use of the computer already available.

Jordan: Slight prospect in the near future. Plan to use the computer (IBM 360/20) at the Department of Statistics, Ministry of Economy.

Kuwait: Fixed plans to make use of the computer at the Central Statistical Office.

Lebanon: The matter is under study.

Pakistan: None. Plan to use computers available in other governmental agencies.

Sudan: None in the present 5-year plan (1969/74).

UAR: Good prospect.

To summarize, the replies received from the participants and information available about eight countries indicate that:

- (a) In only one country the Ministry of Health has its own computer.
- (b) In four other countries, computers are being made use of in processing a varying proportion of vital and health statistics.
- (c) Two more countries have fairly fixed plans to make use of computers already available in other governmental agencies.
- (d) In the remaining countries, they are not making use of electronic data processing in health services at the moment, and there are no fixed plans to introduce it.