

## SUMMARY

### IMMUNIZATION:

A decade ago, only about 1 child in 5 was immunized. By 1992, an estimated 84% of children worldwide had been immunized with a third dose of poliomyelitis vaccine before reaching their first birthday; in developing countries, this level was 82% for a third dose of diphtheria-pertussis-tetanus (DPT), 89% for BCG and 79% for measles vaccines. Even so, millions of children do not receive immunization against the main vaccine-preventable diseases, which kill nearly 1.8 million children each year. In developing countries, only about 43% of pregnant women receive 2 or more doses of tetanus toxoid. This study was designed to throw some light on EPI coverage, Morbidity and Concepts of doctors, nurses and attendant mothers towards the activities and achievements of EPI Programme in both Qatar and Benha/Egypt.

The study also includes a sample size of 50 mothers attending different health services. There was a good cooperation between the study and different health administrative components in Qatar and in Egypt. There were several questionnaires designed on local and international level to study the following items:

- 1) General concepts towards the EPI activities among doctors, nurses in both Qatar and Egypt. (Appendix I).
  - 2) Assessment of the mother's concept about vaccination.
- Reviewing the available cluster immunization coverage and the underlying factors for the situation in Qatar was carried out in 1987 to determine the coverage by six EPI antigen.
  - Prospective study as regard the national computerized immunization status among samples of infants was done in a sample of health centres inside and outside Doha.

- Morbidity of EPI target diseases was studied in the last 5 years in Qatar 1988 - 1992. This data were computerized for analytical purposes and presented in the form of graphs.

The present study concluded the following:

- 1) As regards the general concepts of doctors and nurses towards EPI activities:

It was demonstrated that 2 - 3 vaccination sessions/week is the most commonly practised schedule in Egypt 100% while in Qatar it is 65.9%. The nurses in both Egypt and Qatar are the responsible persons for administration of immunization, 59% and 100% respectively.

- There was assessment for pre-vaccination medical check-up qualitatively which was 100% in Qatar while in Egypt it was far beyond that level.

- As regards the knowledge towards vaccination, we studied two parameters both in Qatar and Egypt. These parameters are:

- 1) Source of knowledge which is mainly regular circular in both Qatar and Egypt 90% and 78% respectively.

- 2) Vaccine's contra-indication which represents 46.59% and 57% in Qatar and Egypt respectively.

- As regards post-vaccination complications -
- there were several parameters which were studied both in Qatar and Egypt:

- 1) Occurrence of post-vaccination complications which represents 91% in Egypt while in Qatar it was 75%.

- 2) Type of post-vaccination complication fever represents the main type of these complications in Egypt 47.25% while in Qatar it was more than one complication 46.97%.

3) DPT is the most common vaccine which led to post-vaccination complications in Qatar 86.4% while in Egypt there are BCG and DPT (53.8% to 46.2% respectively).

As regards the cold chain -

There were several parameters which were studied both in Qatar and in Egypt:

1) Knowledge toward the cold chain among health team in Egypt is fair enough (89.7%) while in Qatar it is not satisfactory 38.5%.

2) Vaccine transportation - The WHO EPI specification regarding ice packs and vehicle are followed 100% in Qatar.

3) Vaccine Storage - The WHO EPI specification regarding refrigerator condition is followed 100% while ice packs and documentation represents 61.5% in Qatar.

- As regards the drop-outs & defaulters -

The method of recall of drop-outs is telephone 100% in Qatar while in Egypt it is personal communication 100%. Obstacles were the most common underlying causes in both Egypt and Qatar 69% & 83% respectively. The barriers facing implementation of EPI activities were studied which revealed that lack of public awareness and vaccine problems are the most common barrier in Egypt (44% & 16% respectively) while in Qatar it was, work overload 46

The social status of the studied mothers in Qatar was studied which revealed that 80% of the attendants who read and write and 60% with basic level of education were Qatari while 75.2% of those with university level were non-Qatari, 53.9% of working mothers are Qatari while 46.1% are non-Qataris.

As regards the site of delivery of the newly borns in the Qatar, it was found that 100% of the Qatari and 90.9% of the non-Qatari newly born were delivered in a hospital. The awareness of the mothers towards vaccine given to their infants was found that 70.8% and 86.4% of Qatari and non-Qatari respectively had the knowledge.

As regards the vaccination coverage, there were two results - one done in the form of survey and the other is estimated. For vaccination coverage surveys in both Egypt and Qatar, it was found that the coverage in 1987 was higher in Egypt than in Qatar in all vaccines except BCG. While the estimated one was done in Qatar from 1988 to 1992 which revealed there is a steady increase in vaccination coverage for all vaccines with years. The drop-out rates were recorded both in Egypt and Qatar which demonstrated that drop-outs of DPT and OPV were higher in Qatar than those in Egypt. The reason for immunization failure in Egypt was obstacles (55.7%) while in Qatar it was lack of information (51% )

As regards the vaccination coverage in different health centres, we divided the health centres in Qatar into two groups - one considered a rural area and the other is urban. The vaccination coverage in the urban one was higher than that of rural. The drop-out rates of DPT, OPV, HBV and overall revealed that the urban health centre is much better than the rural one.

The morbidity of six EPI target diseases in Qatar were computerized and analysed which revealed that the trend of pulmonary T.B is going down in the last 5 years, but still more prevalent in 25 - 35 aged group. In spite of viral hepatitis going down in the last 5 years, it is still more prevalent in the age group below 15 years.

As regards the specific age morbidity of whooping cough and measles it was found that it was more common below age of 15 years.