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## Organization of Mother and Infant Care Services (Urban) in Indonesia.

by

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In Jakarta, being the capital of Indonesia, mother and infant care started in the hospitals long before the second world war, mainly in the curative sense.

The Government's Central General Hospital was the center of activities. acting also as the teaching hospital of the Government's Medical School. In the late thirties it was felt by the then acting Head of the Department of Pediatrics of that hospital, Prof. J.H. de Haas, that infant care should also be extended to areas outside the hospital. As a start he set up 6 socalled well-baby clinics in 6 most densely populated areas of the town in rented civilian houses. By that time the population of Jakarta was approximately 300.000. Assistants of his department supported by medical students had to work in those wellbaby clinics only in the sense of providing preventive measures, i.e.

assessing growth and development of infants of the neighbourhood, advising in nutrition and care, doing tuberculin tests, immunizations etc. Sick infants were strictly refused. The Department of Pediatrics had also set up a milk kitchen for preparing and distributing ready diluted milk in bottles to the well-baby clinics for those infants who were not able to be breastfed.

The next development was that the Department of Obstetnics of the same hospital felt that the extramural policy should also be applied to pregnant mothers in the town.

The existing well-baby clinics were soon expanded and transformed into Mother and Child Health (MCH) centers, of which some had a few beds for normal deliveries attended by a midwife. Being assigned to those centers, she occasionally would assist the pediatricians in checking up the

<sup>\*</sup> Invited panel background paper, XIV International Congress of Pediatrics, Buenos Aires, Argentina, 3-9 October, 1974.

infants. Most of the deliveries were however carried out in the homes of the antenatally controlled mothers. The set-up of such MCH centers was regarded as a good public health measure and soon other towns in the country, even smaller ones, followed suit with the approval of and financial aid from the ministry of health.

During the war, activities of the MCH centers could not be continued properly. After the war and especially in the late fifties the number of MCH centers grew steadily to about 6500 presently in the whole country for a population of approximately 120 million at this moment. It should be pointed out that up to now the policy of the MCH centers remains of preventive nature. Due to shortage of medical and paramedical personnel home visits could not be carried out.

An evaluation of what is really being done in the MCH centers and of the response of the population around the centers has actually never been carried out, so that the real impact of the MCH centers on the improvement of health of mothers and infants could not be assessed.

The production of doctors and midwives could not keep pace with the ever-increasing population, so that the majority of the deliveries of the common people, even in Jakarta and other towns were and are still carried out by indigenous midwives. In the early sixties a start was made to give proper knowledge to the indigenous midwives in asepsis and in early detection of abnormal deliveries so that they could send such deliveries to proper hospitals without wasting any time. Such instructions are presently still being given to the indigenous midwives in urban as well as in rural MCH centers either by doctors or qualified midwives attached to the MCH centers. The outstanding ones among them receive toolkits from the UNICEF and WHO as a reward.

As seen from the point of view of pediatrics, MCH centers can be considered as still functioning in an unsatisfactory way. Figures from urban as well as rural areas show that visits of infants to the centers are most frequent for the age period of 1 to 2 months. Thereafter frequency drops very sharply, visits of pre-school age children are practically nil.

If one still considers infant mortality rate as a parameter of health status of a population, then one can say that there is indeed improvement in Indonesia. The infant mortality rate of pre-war time was estimated as 200 - 300 per thousand which has dropped at present to 80 - 110 per thousand. Whether MCH centers have any major part in that drop has still to be proven.

The most vulnerable group of children in Indonesia is still of the pre-

school age period. Parents do not take them to the MCH centers. Only a small percentage are sent to kindergartens of which only a few are supervised by privately paid doctors. School health supervision only exists in a small percentage of primary schools in urban areas. This is primarily due to shortage of doctors (7000 doctors for the entire Indonesian population of 120 million at present).

As time moves on, population increases tremendously and as a consequence urbanization takes place. Jakarta, which 3 decades ago had a population of only 300.000, is now inhabited by 5 million people. Existing hospitals become overcrowded. For example, the OPD of the Department of Child Health of earlier mentioned Central General Hospital had 118.000 new patients in a 1-year period in 1968. The government could not cope with the increasing demand so that in Jakarta private initiative has set up a few hundreds of private delivery homes, which also serve as incomplete well-baby clinics. The government has issued a recommendation that every delivery in those homes should also be attended by a pediatrician. In practice, this is not the rule yet due to shortage of pediatricians.

The idea to lighten the burden of the existing hospitals became a reality since Jakarta is divided into 5 "wilayahs" (= regions), i.e. Central,

East, West, North and South Jakarta. In each "wilayah" a small general hospital is established with facilities for internal medicine.obstetrics, surgery, pediatrics, radiology etc. So, at this moment the Central General Hospital which is located in Central Jakarta serves as regional hospital and referral hospital as well for the 4 other regional hospitals. Here, only pathological deliveries are carried out. Newborns at risk are rushed to the Subdivision of Neonatology. The burden of patients becomes indeed less. For instance, in 1973 new patients of the OPD of the Department of Child Health numbered only 40.000 as compared to 118.000 5 years earlier. However, this does not mean that the children have become healthier. The morbidity patterns of those 2 periods were similar. In frequency URI are still number 1, followed by G.I. infections. Then follow PCM, vitamin A deficiency and tuberculosis as the 5 most frequent diseases in childhood in Jakarta. The highest frequency of those 5 major diseases was and is still found in the pre-school age period.

As time proceeds, it is felt that regional hospitals with the still existing MCH centers are not sufficient in delivering total health care for the population of Jakarta. Health administrators started to think of the so-called integrated health care since the late sixties. As a consequence a

few so-called Health Centers (H.C) were established as a pilot project. HCs should have curative as well as preventive functions, so that finally all MCH centers should be incorporated into the newly established HCs. On paper functions of HCs should include:

- Prevention and eradication of contagious diseases.
- 2. Treatment and eventually admission of patients.
- Health education of the population.
- 4. Family planning.
- 5. MCH care.
- 6. School health.
- 7. Community health promotion.
- 8. Improvement of nutrition.
- 9. Hygiene and sanitation.
- 10. Dentistry.
- 11. Psychiatry.
- 12. Ophthalmology.
- 13. Rehabilitation.
- 14. Pharmacy.
- 15. Laboratory.
- 16. Statistics
- 17. Public Health administration.

After many discussions among the health administrators, it is decided that the area covered by a HC should be a district (a division of a wilayah), usually with a population of 30.000 - 50.000. Eventually sub-HCs could be established in the sub-districts, if the area of a district is too large.

Each HC should be headed by a doctor and the 17 above mentioned

functions should be carried out by individual specialists. For the time being due to shortage of manpower, officials of a HC usually have multifunctions.

Coming back to Jakarta as an urban area, at this moment some 135 MCH centers still exist, but their localization is not according to administratively defined areas. Sooner or later however, they will be incorporated into the HCs.

Jakarta, being divided into 5 willayahs, has 5 regional hospitals, of which the earlier mentioned Central General Hospital serves as referral hospital for the other 4 regional hospitals as well.

In the 5 wilayahs the number of HCs totals 27, one in each of the 27 districts. Each district is divided into subdistricts totaling 69 with also 69 sub-HCs.

The 27 HCs are headed by doctors, the sub-HCs, however, still by senior midwives only under the supervision of the HC doctors.

People can freely choose to which HC or hospital they directly want to go for treatment, but the aim is that those who come from the outskirts of the town go for the sake of convenience to the nearest HC or sub-HC. In case of difficulties e.g. due to severity of the disease, they will be immediately transferred to either the regional or the Central General Hospital.

It is too early to evaluate whether this system will be of ultimate importance to improve mother and child care in particular and total health care of the population in general.

Two things should be studied and seriously considered. Firstly, what is actually being done in the HC; this depends primarily on the knowledge, skill and attitude of the personnel and also on the available funds to run such a HC properly.

Secondly, it depends on the population around such a HC whether they will utilize the opportunity provided by the system. This again will substantially depend on their level of education and whether they really feel the need to utilize the HC. Further, whether they have the consciousness and financial capability to follow the instructions and advices issued by the HC.

An objective longitudinal research with a control area might be worth while.

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