VITAL REGISTRATION IN
THE REPUBLIC OF INDONESIA
WITH SPECIFIC PROPOSALS
FOR WEST SUMATRA

A Report Prepared By PRITECH Consultant:
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TECHNOLOGIES FOR PRIMARY HEALTH CARE (PRITECH) PROJECT
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APPENDIX A: Situation of Data Utilization at the Puskesmas and Regency Levels in West Sumatra, Indonesia, 1985, by Dr. Paramita Sudharto and Mrs. Herawati.

APPENDIX B: Implementation Plan for Recording and Reporting Statistics in Kotamadya Payakumbuh, Kabupaten Limapuluhkota and Pesisir Selatan, by Dr. Linda Taufik.
I. SUMMARY DESCRIPTION OF THE SCOPE OF WORK

- Review with Dr. Ratna Budiarsa of Litbangkes the previous work in Java, Aceh and West Sumatra on the system to obtain birth and death data, and cause of death.

- Review with Dr. Paramita, Bureau of Planning, the system of data reporting from village, health center and district, and the work begun in West Sumatra.

- Review with BKKBN, the vital statistics records on births and deaths and how they are received and reported to the province.

- In West Sumatra, visit village, health center, district and province to observe the function of the birth and death registration system including cause of death reporting.

- Advise province on methods to improve forms, recording, and data analysis methods to measure inaccuracies and ways to reduce them; and measurements of incompleteness and the ways to reduce incompleteness.

- Bring to Indonesia, or make available after departure, materials from other countries, concerning birth and death reporting in the developing world, so that the province will have an up-to-date bibliography and a collection of reprints and or books for reference.

- Through a telephone call from Dr. Feldman in Indonesia an additional request was made to review and make recommendations concerning automation of vital records in West Sumatra.
Although the specified scope of work focuses primarily on the Province of West Sumatra, some of my comments and recommendations are addressed to the vital registration/statistics system for the nation in general. This was done primarily for two reasons:

1. Unless changes and new initiatives are made at the national level it will be much more difficult for a single province such as West Sumatra to develop an efficient system.

2. The province is always an integral part of the national vital registration/statistics system and must function as such. Therefore, when a recommendation is addressed to the national level it applies to the provincial level.

The obverse of this is that what applies in one province is likely to apply in most or all other provinces and will most likely also apply at the national level. In a decentralized system initiatives and leadership can be demonstrated at the national or provincial level, and in either case, it may ultimately influence the entire system.
II PURPOSE OF THE PROJECT

The scope of work (I) describes the specific purposes of this project. A more general statement of the purpose follows:

The Republic of Indonesia established a vital registration system for reporting births and deaths on specified forms in 1977-78. Since this time, a system has been partially established; however, it remains too incomplete to produce reliable data. The Department of Health and others in the Province of West Sumatra have demonstrated a strong interest in improving the current system so that more useful data can be obtained. Therefore, technical assistance was sought, to review current activities in vital registration/statistics and to make recommendations concerning these activities and others that are needed to establish a functional vital registration/statistics system.

III METHODOLOGY

The method followed consisted of fact gathering through discussions with key individuals (officials and researchers) at the provincial and national level, through discussions and observation with involved persons at representative village, community health center, sub-regency and regency levels and through a review of the literature. Forms, questionnaires, reports and articles were reviewed.

Schedule and Activities - R.D. Nashold

9 May : 07:30 Molly Gingerich, Office of Population and Health, USAIU
08:30 Dr. Paramita Sudharto, Bureau of Planning, MOH
09:30 Dr. Ratna Budiarsa, National Institute of Health Research and Development, MOH
12:00 Dr. Sri Da Costs, Head, Data Center, MOH
10 May: A.M. Dr. Sri Pudjiastuti, Chief, Population Division, Central Bureau of Statistics
   P.M. Dr. Richard Arnold, Advisor Field Epidemiology Training Program
11 May: A.M. BKKBN - Dr. Sardin Pabbadja and Dr. Mazwar Hurdin. Meeting cancelled to avoid appearance of BKKBN involvement in Vital Statistics. Discussion with Dr. Gary Lewis, Research Advisor to BKKBN and David Piet of USAID.
   P.M. Reviewed paper by Dr. John A. Ross
       Indonesia: Demographic Background And Births Averted
       Reviewed paper by Dr. Ruth R. Puffer
       Infant and Childhood Mortality in Indonesia, 1983
       Reviewed paper by Dr. Ratna L. Budiarso, et al.
       Knowledge and Practice Toward Mother and Child Health and Family Planning, 1982-1983
       Reviewed paper by Dr. Parmita Sudharto
       Situation of Data Utilization at the Puskesmas and Regency Levels in West Sumatra, 1985
12 May: Travel from Jakarta to Padang
13 May: Visit Health Department, Padang, West Sumatra
14 May: Visit to Desa Purwajaya, Harau, Limapulahkota
       Discussion with village leader, staff, village cadres, village women's health and welfare movement (PKK)
       Visit to Desa Ibuh, Kecamatan Ibuh, Payakumbah
       Discussion with village leader, staff, village cadres, village women's health and welfare movement (PKK)
15 May: Visit Painan, Kabupaten Pesisir Selatan
       Discussion with Dokabu Syahril Sani of Pesisir Selatan Discussion with Bupati Ismil of Pesisir Selatan
16 May: Travel to Yogyakarta
17 May: Visit Kabupaten Magelang, Central Java
       Discussion with Bubati Soliehin and staff Visit Puskesmas Kaliankrik
       Discussion with Dr. Januar Achmad and staff
18 May: Visit Puskesmas Kecamatan Kajoran
Discussion with Dr. Hartanto
19 May: Travel to Bangdung
20 May: Visit Bagian I. Kesehatan Anak F.K. University of Padjadjaran, Dr. Hasan Sadikin Hospital, Jl. Pasteur 38 Bandung, West Java
Review study by Alisyahbana et al. Perinatal Mortality and Morbidity Survey and Low Birth Weight
21 May: Visit F.K. University of Padjadjaran, Dr. Hasan Sadikin Hospital
Discussion with Dr. Anna Alisyahbana and Dr. Emelia Suroto-Hamzah and reviewed their proposed study. The Risk Approach in Maternal and Child Health As A Primary Health Care Strategy: An Intervention Study in West Java, Indonesia, 1985-1988
22 May: Visit Province of Jakarta, Vital Statistics and Data Processing Offices
Discussion with Dr. H. Maskup Ustianto and staff
23 May: Visit Ministry of Interior, Vital Statistics Office
Discussion with Poedji Achmad Mudjawat, Director Pembinaan Uman Pemerintahan
Discussion with R.W. Yadhunandanan, National Institute of Research and Development
24 May: Travel to Padang
25 May: Work on draft of report
28 May: Presentation on draft of report and departure
IV - VI. OBSERVATIONS, CONCLUSIONS, RECOMMENDATIONS

Major Factors Influencing Vital Registration

Legal identity use - Because of the extensive civil registration system in Indonesia that requires an identification card for all persons aged 17 and over, the birth certificate is not the primary legal document of identification as it is in such countries as the United States, Canada, England and elsewhere. In those countries where the birth certificate is the primary legal document, it is used to obtain other documents or to attain certain status; for example, school enrollment, social security number, driver's license, employment, military enlistment, marriage license, passport, and proof of retirement age. If a birth certificate does not serve these purposes there will be less interest in birth registration. This appears to be the situation in Indonesia.

Similarly, there are fewer current uses for the death certificate in Indonesia. Medical coding of cause of death is not adequately developed to be very useful and the need for death certificates to settle estates and for insurance claims generally does not exist. Because few large computerized files exist there is little need for death lists to purge such files.

Public health use - In many countries birth, fetal death and death registration provide a valuable source of health data because health and medical information are included on the birth and death certificates. For example, there is medical certification of the cause of death that uses the International Statistical Classification of Diseases, now in its ninth
revision. Systems that yield reliable rates for many conditions and categories of the population make it possible to identify high risk groups and areas so that special public health efforts can be made. In Indonesia the birth record contains largely demographic information. Health data pertaining to birth comes from special studies of medical records or from household surveys. Similarly, cause of death data are obtained by special research and special surveys rather than from death certificates. It should be noted that in Indonesia vital registration is not part of the Ministry of Health or the Central Bureau of Statistics as it is in many countries. It is located in the Ministry of the Interior which has several major areas of responsibility including the national identification card system.

Family planning use - In the absence of good annual birth data family planning (BKKBN) in Indonesia, has by necessity, used estimates of birth rates based on special surveys and other research. BKKBN also uses estimates of births averted based on acceptors of family planning (see: John A. Ross, Indonesia: Demographic Background And Births Averted, Feb, 1985 and Bongaarts method for determining total fertility rate). Ross uses the numbers of acceptors discounted for supply wastage and use wastage to determine effective users and then uses a ratio of one birth averted each year per four users or per three users. BKKBN can thus use acceptors (service or process data) in place of declining birth rates (outcome data). With these methods in place BKKBN is not dependent on a vital statistics system for evaluating family planning; therefore, they are likely to feel less urgency about requesting the Ministry of Interior to improve the data.
Other demographic use - Births, deaths, and migration are the components of population change. Births and deaths, especially for minor civil divisions (city, county, town, and village) are best obtained by registration systems and migration by direct or indirect means of measurement. As pointed out in the introduction, birth and death data become the foundation for population estimates and projections at all jurisdictional levels. In the absence of costly special censuses this becomes the means for obtaining the base population for calculating rates required for valid comparisons. In Indonesia, birth and death registration data in most areas have been too incomplete for such use; therefore, special censuses, intercensal interpolations and extrapolations and surveys have been used when the necessary resources are available.

Genealogic research - Finally, in some countries there is great public interest in maintaining a vital registration system as a source of family history information. Where such documents have been kept for several generations, it is possible through genealogic research to trace a family by means of birth, marriage and death records. In a developing nation such as Indonesia this is not a possibility.

Summary - It is apparent that some of the major justifications for maintaining vital registration systems in many countries either do not exist or exist to a lesser degree in the Republic of Indonesia. Nevertheless, there is ample reason for moving ahead with the system as it was conceived and begun in Indonesia. The live birth, stillbirth and death reports as they are now designed, with a few additions, will yield a stable core of baseline data that
could be used as benchmarks for many programs. To make valid comparisons between areas it is necessary to obtain reasonably accurate geographically specific birth and death rates. Moreover, birth and death data are the fundamental building blocks for doing accurate population estimates and projections and such data are in turn, the basis for calculating rates for all population based programs. Special surveys of the population are necessary; however, they generally lack continuity over time and place. To achieve this continuity it is necessary to have a sound birth and death registration system.

Current National System

In the Republic of Indonesia, it was recognized that a national system was needed and as a result there were two presidential decrees issued, one in 1977 and the other in 1978. Birth, stillbirth \(^1\) and death reporting was made part of a civil registration system and responsibility for the system was placed in the Ministry of the Interior. The civil registration system provides for a national identity card that everyone must obtain at age 17. In addition to birth and death data the system obtains in-migrant and out-migrant data. When a person travels from one area to another or changes residence, the appropriate official must be notified. The system classifies foreigners and may also be used to determine eligible voters. It thus provides a means for

\(^1\)Stillbirth is used in this paper rather than fetal death because it is a better translation of the Indonesian words lahir mati.
summarizing population movement and change. The national system is largely a decentralized manual system with data summaries flowing from minor civil divisions to the provincial level and then on to the national level.

Departemen Dalam Negeri (Ministry of Interior)
Propinsi (Province)
Kabupaten/Kodya (County/City)
Kecamatan (Sub-County)
Desa (Village)

Birth, stillbirth and death records are on three part forms with the original going to the family and the copies to the appropriate levels of government (desa and kecamatan) See: pages 11 - 13.

Province of Jakarta

The Province/City of Jakarta essentially uses an expanded version of the national form with additional data items added to the birth certificate, such as birth weight, marital status of mother, religion and education of mother and father. Additional items have also been added to the death certificate, such as education. Categories have been added for coding cause of death. These are sickness, accident, murder, suicide, pregnancy, born dead and other. Boxes are added in which to enter the code number of the response to facilitate data entry (pre-coding). These forms are included on pages 14 and 15.
**SURAT KELAHIRAN**
*(BIRTH)*

**BABY (BABY)**

1. Nama lengkap *(Name)* ..................................................
2. Jenis kelamin *(Sex)* Laki-laki ☐ ☐ Perempuan ☐ ☐
3. Dilahirkan *(Date of Birth)* tgl. ........... bln. .........., th. 19 ........
4. Kelahiran *(Birth Order)* tunggal ☐ kembar, 2 ☐ 3 ☐ 4 ☐ ..

Jika kembar, anak ini lahir yang ke, 1 ☐ 2 ☐ 3 ☐ 4 ☐ ..
5. Tempat kelahiran : rumah bersalin ☐ bukan rumah bersalin ☐

*(Place of Birth)* Desa .......... Kab/Kodya *) : ............
6. Penolong kelahiran : Dokter ☐ bidan/perawat ☐ dukun ☐

*(Birth attendant)* Lainnya ☐

**IBU (MOTHER)**

7. Nama lengkap *(Name)* ..................................................
8. Alamat *(Address)* ..................................................

9. Dilahirkan *(Date of Birth)* tgl. ........... bln. .........., th. 19 ..... Umur ....... th.

**AYAH (FATHER)**

11. Nama lengkap *(Name)* ..................................................
12. Dilahirkan *(Date of Birth)* tgl. ........... bln. .........., th. 19 ..... Umur ....... th.

dan K.T.P. .................................................................

......................... 19 ...

Kepala Desa/Lurah : .................
*(Head of Village)*

(.........................)

*) Coret yang tidak perlu,
**SURAT LAHIR MATI**

*STILL BIRTH*

No. ..................................

---

**YANG LAHIR MATI**

1. **Nama lengkap (Name):** ..........................................
2. **Jenis kelamin (Sex):** laki-laki □ perempuan □
3. **Dilahirkan (Date of birth):** tgl. ...... bln. ....................., th. 19......
4. **Ketahiran (Single/Twin):** tunggal □ kembar, 2□3□4□ ......
   Jika kembar anak ini lahir yang ke 1□2□3□4□ ......
5. **Tempat kelahiran (Place of birth):**
   Rumah bersalin □ bukan rumah bersalin □
   Desa ........ Kab./Kota ..... □
6. **Penolong kelahiran (Birth Attendant):** dokter □ bidan/perawat □ dukun □ lainnya □
7. **Cara penguburan (Disposition):** dikenal □ dihakar □ lainnya □

---

**IBU (MOTHER)**

8. **Alamat (Address):** .............................................
9. **Nama lengkap (Name):** ..........................................
10. **Dilahirkan (Date of birth):** Di ............. tgl..... bl th. 19.. umur : ........ th.
    (Citizenship): WNRI □ O A □
11. **Kewarganegaraan:** ..........................................

---

**AYAH (FATHER)**

12. **Nama lengkap (Name):** ..........................................
13. **Dilahirkan (Date of birth):** tgl.... bl th. 19....../Umur... th.
14. **Kewarganegaraan:** WNRI □ O A □
15. **Pekerjaan/Occupation:** ..........................................
16. **No. Kartu Keluarga (Identity card number):** ..........................................
    dan KTP.

*) Coret yang tidak perlu ...........................................
   Kepala Desa ..........................................
   Head of Village ...........................................

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-12-
### SURAT KEMATIAN (DEATH)

No. .............

1. Nama lengkap *(Name)* ..........................................................
2. Jenis kelamin *(Sex)* Laki-laki ☐△ Perempuan ☐♀
3. Alamat *(Address)* .................................................................

 *(Birth place)*
4. Dilahirkan : tgl. .........., bln. .........., th. 19 ................
5. Tanggal kematian : tgl. .........., bln. .........., th. 19 ................
6. Umur pada saat kematian *(Age at death)* hari/bulan/tahun *)
8. Agama *(Religion)* : Islam ☐ Kristen ☐ Hindu ☐ Budha ☐ Lainnya ☐
9. Status perkawinan : belum kawin ☐ kawin ☐ janda/duda ☐
10. Pekerjaan *(Occupation)* ..........................................................
11. Tempat kematian *(Place of death)*
    Desa : .................
    Kab./Kodya *) : .................
12. Sebab kematian *(Cause of death)*
    Yang menentukan : Dokter ☐ perawat ☐ ten. kes, lain ☐ Lainnya ☐
13. No. Kartu Keluarga *(Identification number)*
    KTP. : .................


Kepala Desa/Lurah: .................
*(Head of Village)*

*) Coret yang tidak perlu. (.................................)
PEMERINTAH DAERAH Khusus IbuKota jakarta

KELURAHAN : (1) : ................................
KECAMATAN : (2) : ................................
KOTA : (3) : ................................

Jalan : ................................................................. Telp. No. : 057380

SURAT LAPORAN KELAHIRAN

No. ..................................

I. BAYI

1. a. No. Kartu Keluarga  
   b. Nomor Kartu Orang  
2. Nama lengkap  
3. Jenis kelamin  
4. Tanggal lahir  
5. Dilahirkan di  
6. Tempat lahir  
7. Kode Propinsi kelahiran  
8. Penolong Kelahiran  
9. Peristiwa kelahiran/dengan tindakan  
10. Kode kelahiran dengan tindakan  
11. Jenis kelahiran  
12. Berat dan panjang bayi waktu lahir  
13. Warganegara  
14. Kebangsaan/Keturunan Asing  
15. Nama lengkap  
16. a. Nomor Pokok Penduduk  
17. b. Status Kependudukan  
18. Tanggal lahir  
19. Status perkawinan  
20. Warganegara  
22. Agama  
23. Pendidikan  
24. Kelahiran ke  
25. Alamat  
26. Nama lengkap  
27. Nomor Pokok Penduduk  
28. Tanggal lahir  
29. Warganegara  
30. Kebangsaan/Keturunan Asing  
31. Agama  
32. Pendidikan  
33. Alamat  

II. I.BU


III. A.YA.H

Lihat Daftar Nomor Kode
Isi dengan huruf kecil
Lihat Surat Keterangan Kelahiran

Jakarta, .................................................................
LURAH: ..............................................................

-14-
| 1. a. No. Pokok Penduduk |   |   |
| b. Status kependudukan |   |   |
| 2. Nama lengkap |   |   |
| 3. Jenis kelamin |   |   |
| 4. Tempat dan Tgl. lahir |   |   |
| 5. Warganegara |   |   |
| 6. Kebangsaan/Keturunan Asing |   |   |
| 7. Status perkawinan |   |   |
| 8. Agama |   |   |
| 9. Pendidikan |   |   |
| 10. Hubungan keluarga |   |   |
| 11. Pekerjaan |   |   |
| 12. Alamat |   |   |
| 13. Meninggal di |   |   |
| 14. Tanggal kematian |   |   |
| 15. Tempat kematian |   |   |
| 16. Sebab kematian |   |   |
| 17. No sebab kematian/Kode I.C.D. 1965 |   |   |
| 18. Yang memeriksa |   |   |
| 19. Tanggal pemeriksaan |   |   |
| 20. Surat pemeriksaan |   |   |
| 21. Cara penguburan |   |   |
| 22. Tempat penguburan/pembakaran |   |   |

Jakarta, ........................................................

LURAH: .............................................
The system collects data from a population of more than seven million people. In addition to births and deaths, it includes in-migrants, out-migrants, seasonal population and daytime population. It produces a monthly summary of population movement and change in the Province of Jakarta categorized into five districts. Population density is calculated for these five districts. The system yields large amounts of computer printout for planning purposes, but does not routinely produce birth and death rates.

If a person dies in the province without an identity number or if the identity number is unknown, the death is not tabulated. Similarly, if a child is born in the area and the parents do not have identity numbers, the birth is not tabulated. Many countries tabulate birth and death by place of occurrence of the event and by place of residence of the individual with an exchange of records between jurisdictions to avoid possible undercounting. At sometime in the future this could be done in Indonesia.

**Reporting of Vital And Health Statistics**

From visiting local offices and health centers in west Sumatra, Central Java and Jakarta and from meeting with officials from national government agencies involved with vital registration or with surveys that collect birth and death data, it becomes clear that the level of reporting of births and deaths in Indonesia is highly variable and overall seriously incomplete. Agencies such as the Ministry of Interior; The National Institute of Health

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2 The Province of Jakarta uses an NCR 8555 mainframe computer with 14 terminals operating in three shifts - with two shifts for data entry. Surabaya is the only other city that has a computer installed for processing such data. The Ministry of Interior is currently planning for computerization.
Research and Development, The Data Center and The Bureau of Planning within
The Ministry of Health; The Population Division of the Central Bureau of
Statistics; Family Planning and other agencies interested in vital and health
statistics should work closely together to improve awareness of the importance
of reporting vital events and health statistics.

Recommendation:

Establish or revitalize a national committee for vital and
health statistics to encourage the national reporting of
uniform minimum basic data sets for vital and health
statistics.

Members of the committee would work to commit their own agencies and
other statistically involved agencies that work closely with provincial and
local officials and with the public to better report vital and health
statistics. The national intent, as shown by the existing vital statistics
forms for live birth, stillbirth and death should be reemphasized. The
committee would design or approve minimum basic data sets for vital and
health statistics. It could also be convened or reestablished to review and
modify data sets at appropriate intervals.

Similarly, vital and health data advisory committees can be set up at
the provincial level to encourage complete reporting, review data collection,
help coordinate date activities, avoid duplication, advise program managers
on data, and assist in data priorities for the province.

Recommendation:

Establish or revitalize vital and health data advisory
committees at the provincial level to make recommendations for
appropriate data activities at this level.
Minimum Basic Data Sets

An important concept for improving vital registration and health statistics in Indonesia is that of uniform minimum basic data sets. For vital registration the obvious starting point is with the current national forms for birth, stillbirth and death.

A uniform minimum basic data set or sets should also be developed for health, such as for the treatment which occurs at community health centers (Puskesmas) \(^3\) and at hospitals. Such minimum data sets would be limited to basic demographic variables such as age and sex and to health information standardized for the nation. These data would flow in the same way health data flow from Puskesmas or hospital to kabupaten to province and to the national government. The data would be summarized and published by the kecamatan, kabupaten, province and national government. Vital events and health care data could be published in a single report, in separate reports, or in a series of reports annually by area.

The concept of a uniform minimum basic data set stresses what is appropriate and practical for the present or for a short range time frame. It should focus on the most important data for routine continuous national data collection. It should not be overly influenced by research interests that can be best handled through more limited special studies. A uniform minimum national data set does not exclude the reporting of special data items in particular areas of the country, but these would not be part of the national minimum basic data set. Such data items would not be sent on to the national

\(^3\) Dr. Sri Da Costa, head of the Data center in the Ministry of Health.
level for tabulation. Uniform minimum basic data sets should be reviewed at periodic intervals, such as each decade. This is for the purpose of possibly making modifications to reflect improvements in health care, changing priorities or ability to process data.

Current Birth and Death Forms

The standard birth, stillbirth and death forms for Indonesia represent the obvious starting point for developing minimum basic data sets for vital events in Indonesia. The items on the birth and death form are listed in tables 1 and 2, with the U.N. priority statistical items designated and with suggested manual statistical tabulations for the desa and kecamatan level.
Table 1

Indonesian Standard Live Birth Form
Items, U.N. Priority and Statistical Tabulation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Name of baby</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>2.</td>
<td>Sex</td>
<td>Yes</td>
<td>Total Male and Female</td>
</tr>
<tr>
<td>3.</td>
<td>Data of birth</td>
<td>Yes</td>
<td>Total by Month</td>
</tr>
<tr>
<td>4.</td>
<td>Single, twin, other</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td></td>
<td>Birth Order</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td>5.</td>
<td>Place of Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home, Other</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td></td>
<td>Village, County/City</td>
<td>Yes</td>
<td>Total by Place</td>
</tr>
<tr>
<td>6.</td>
<td>Birth Attendant</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Name of Mother</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>8.</td>
<td>Address-village,</td>
<td></td>
<td>All Items by Place</td>
</tr>
<tr>
<td></td>
<td>County/City</td>
<td>Yes</td>
<td>Total by Age Group</td>
</tr>
<tr>
<td>9.</td>
<td>Age of Mother</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td>10.</td>
<td>Citizenship of Mother</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Name of Father</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>12.</td>
<td>Age of Father</td>
<td>No</td>
<td>Total by Age Group</td>
</tr>
<tr>
<td>13.</td>
<td>Citizenship of Father</td>
<td>No</td>
<td>Total by Category</td>
</tr>
<tr>
<td>14.</td>
<td>Identification Number</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>


Table 2

Indonesian Standard Death Form
Items, U.N. Priority and Statistical Tabulation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Name</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>2.</td>
<td>Sex</td>
<td>Yes</td>
<td>Total Male and Female</td>
</tr>
<tr>
<td>3.</td>
<td>Place of Residence</td>
<td>Yes</td>
<td>All Items by Place</td>
</tr>
<tr>
<td>4.</td>
<td>Date of Birth</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>5.</td>
<td>Date of Death</td>
<td>Yes</td>
<td>Total by Month</td>
</tr>
<tr>
<td>6.</td>
<td>Age of Death</td>
<td>Yes</td>
<td>Total by Age Group</td>
</tr>
<tr>
<td>7.</td>
<td>Citizenship</td>
<td>No</td>
<td>Total by Category</td>
</tr>
<tr>
<td>8.</td>
<td>Religion</td>
<td>No</td>
<td>Total by Category</td>
</tr>
<tr>
<td>9.</td>
<td>Marital Status</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td>10.</td>
<td>Occupation</td>
<td>No</td>
<td>Total by Category</td>
</tr>
<tr>
<td>11.</td>
<td>Place of Death</td>
<td>Yes</td>
<td>Total by Place</td>
</tr>
<tr>
<td>12.</td>
<td>Cause of Death</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
<tr>
<td>13.</td>
<td>Certifier of Death</td>
<td>Yes</td>
<td>Total by Category</td>
</tr>
</tbody>
</table>
Additions to Standard Forms

Live Birth Form - The U.N. Vital Registration and Statistics Handbook recommends additional first priority items for the birth certificate (page 11). They include weight at birth, number of children born alive, date of registration, legitimacy status and duration of marriage. Of these items the most important variable for Indonesia at this time is clearly birth weight. It is to be noted that birth weight has already been added to the birth form in the Province of Jakarta and elsewhere. It is also always included in studies of high risk live births and infant mortality. Therefore, it is most reasonable to add this item to the standard form.

Recommendation:
Add birth weight to the standard Indonesian live birth form as soon as possible. The data should be tabulated in no fewer than three categories. These are below 2000 grams, 2000-2499 grams and 2500 grams and above.

4 The stillbirth form is the same as the live birth form except that it also contains length of pregnancy and disposition of fetus.
U.N. RECOMMENDED ITEMS

(1) LIVE BIRTH STATISTICAL REPORT ITEMS

(1) Characteristics of the event

*Attendant at birth
*Date of occurrence
*Date of registration
Hospitalization
*Place of occurrence
*Type of birth, (i.e., single or multiple issue)

(ii) Characteristics of the child

Gestational age
*Legitimacy status
*Sex
*Weight at birth

(iii) Characteristics of parents

Age (date of birth) of father
*Age (date of birth) of mother
Citizenship (nationality) of mother, father
*Date (duration) of marriage (for legitimate births)
Duration of residence for mother, father
Educational attainment of mother, father
Ethnic (national) group of mother, father
Interval since last previous live birth for this mother
Literacy status of mother, father
*Number of children born alive to this mother
Number of children of this mother still living
Number of fetal deaths to this mother
Occupation of mother, father
Place of birth of mother, father
Place of residence at a specified date; mother, father
*Place of usual residence of mother, father
Type of activity of mother, father

*priority item
In countries where a high percentage of births occur in hospitals or birth clinics, or where neonatal care is in general, substantially better than it is currently in Indonesia, there is wide interest in recording birth weight below 1500 grams. This is because in some countries most infants weighing 1500 to 1999 grams now survive. At some future time, this should be done in Indonesia. There will also be medical interest in infants over 3500 grams because they are likely to involve more difficult deliveries and are more likely to have birth injuries.

The birth weight variable is very useful statistically and should be cross tabulated with other variables to provide additional information. These include birth status (single, twin, other), birth order and age of mother.

Birth weight is most useful for studies of infant mortality, for example with duration of survival and cause of death. However, this presents another problem because birth weight will be on the birth certificate, whereas the other information is on the death certificate. To cross tabulate the data it would first be necessary to match information from the two records. The other alternative is to do special studies from medical records.

Because the Indonesian birth form does not have a health and medical section it contains little health information such as complications of labor, complications of pregnancy, concurrent conditions and type of deliver. This information is obtained only in special studies of medical records. At this time it would not be advisable to seek such a large expansion of the birth certificate. The higher priority should be to obtain more complete reporting.

**Death Form** - The Indonesian standard death form includes all the U.N. recommended first priority items except date of registration and this for the
present is not important to the system because it is used primarily as a check on late reporting. However, on the death form additional decisions will need to be made concerning categories of data for specific data items. For example, if data are to be tabulated by both place of occurrence of the death and by place of residence of the deceased, decisions must be made about how it is to be done and what geographic categories are to be included in tabulations. Categories must also be determined for occupation and cause of death.

Cause of Death - This represents a major problem that is likely to require interim solutions and long range solutions. Moreover, it is likely that a dual system will exist in Indonesia for some time into the future. For deaths that are medically attended it seems reasonable to apply the standard ICD codes at least at the body system level of categorization. For deaths that are not medically attended in a country that has no medical examiner or coroner system the problem is very different. The most that can be done at this time is likely to be similar to what has already been done in the Province of Jakarta where the following list is used:

Cause of Death

1. Sickness
2. Accident
3. Murder
4. Suicide
5. Pregnancy
6. Born Dead
7. Other

This system includes both deaths in general and stillbirths because of the separate category "born dead".
U.N. RECOMMENDED ITEMS

(2) DEATH STATISTICAL REPORT ITEMS

(i) Characteristics of event

- Attendant at birth (for deaths under one year of age)
- Cause of death
- Certifier
- Date of occurrence
- Date of registration
- Hospitalization
- Place of occurrence

(ii) Characteristics of event

- Age (date of birth)
- Age of surviving spouse (for married)
- Citizenship (nationality)
- Duration (date) of marriage
- Educational attainment
- Ethnic (national) group
- Legitimacy status (for decedents under one year of age)
- Literacy status
- Marital status
- Number of children born alive (for females of childbearing age or older)
- Occupation
- Place of birth
- Place of residence at a specific past date
- Place of usual residence
- Sex
- Type of activity

*Priority items
In Indonesia there is also some sensitivity about listing cause of death on a public document. The medical societies generally view it as confidential information. This will need to be overcome through physician training and public education. Another alternative would be to list only a code number on the record, but this could cause additional errors.

With regard to medically attended deaths, it would be possible to obtain ICD codes from some physicians, particularly those who are research oriented. However, for national use, a greatly simplified or abbreviated list of ICD code categories would be more practical.

For all causes the following list or a similar list could be used.

- Pneumonia
- Diarrheal disease
- Typhoid fever
- Tetanus
- Tuberculosis
- Other infectious & parasitic diseases
- Malignant neoplasms
- Cardiovascular disease
- Bronchitis, emphysema and asthma
- Chronic liver disease
- Perinatal causes
- Injuries
- Suicides
- Homicides
- Symptoms and ill-defined conditions
- All other causes

Recommendation: Abbreviated cause of death lists should be used throughout Indonesia. Currently, as a beginning, it would be most practical to use a list of no more than ten cause groups for medically unattended deaths and a larger list of cause groups for medically attended deaths. These groupings should be consistent with the International Classification of Diseases.
Infant and Maternal Mortality

Infant and maternal mortality deserve special attention because they are such serious problems in Indonesia and because the data are frequently used as indicators for the overall quality of health care. This is usually the data that can best be used to affect policy decisions.

Deaths under one year of age have unique reporting and tabulation problems. First, there is a greater tendency simply not to report an infant death, particularly if the death occurs at home soon after birth. This can only be overcome through the education and perhaps exhortation of local officials and through public education.

With infant deaths occurring for 9-10 percent of live births they represent a significant percentage of all deaths in Indonesia. Infant deaths are also likely to be greatly underreported. One approach for determining the significance of the problem is to do household surveys in which questions are asked about infant deaths. With the development of the Puskesmas system and family planning programs, over time, a larger proportion of women are likely to see a trained health worker during pregnancy, particularly if there is a problem. With this, there should be a growing amount of health data on both live births and infant deaths. These data can be used for special studies of infant mortality in an area. In addition, it provides an opportunity for health workers to encourage the reporting of both live births and infant deaths. The Puskesmas should also send a list of its births and deaths each month to the kecamatan and kabupaten for follow up.
A list of infant causes of death based on ICD categories for possible use in Indonesia is as follows:

**Infant Causes of Death**
- Diarrheal disease
- Pneumonia
- Tetanus
- Other immunizable disease
- Other infectious and parasitic disease
- Congenital anomalies
- Other perinatal causes
- All other infants causes

With maternal mortality rates for the nation estimated to be at least 4 per 1000 births, Indonesia has a maternal mortality rate 60 to 70 times higher than medically advanced nations. This represents about 20,000 deaths per year. In a country that does not have blood supplies available in rural areas many of these women simply bleed to death because the appropriate medical care is not available, or it is sought too late or not at all. Maternal mortality is probably not any more underreported than mortality in general in Indonesia. With infant death it is useful to be able to match the infant birth and death certificates in order to obtain a more complete data base. With maternal mortality in many countries information from the birth certificate of the child, the death certificate of the mother, the medical records and findings of a medical review committee, are used for special studies of maternal mortality.

**Recommendation:**
Special emphasis should be given to the collection, tabulation and distribution of infant and maternal mortality data. It should be widely used in efforts to obtain better medical care in Indonesia.
Decentralized System

Indonesia now has a decentralized vital registration/statistics system. This represents the only practical approach in a large geographical dispersed and culturally pluralistic nation such as Indonesia. The U.N. Vital Registration and Statistics Handbook recognizes that in some countries a decentralized approach is the most efficient and appropriate way to achieve results.

"In the decentralized organizational system a statistical unit at a sub-national political or geographic level prepares the tabulations in accordance with specifications issued by the central agency and passes the finished tables on to the central agency. Data tabulated at the various sub-national offices are consolidated into a national database by the central office."

A decentralized system appears to be very well suited to the new microcomputer technology which is rapidly appearing on the scene throughout the world. For example, in Indonesia, data could be entered into a microcomputer at the kabupaten level and then summary tables could be produced to be sent on to the provincial level. The provinces would in turn, summarize data from the kabupatens at the provincial level and send it on to the national level where the data from the provinces would be summarized into national data. Microcomputers could also be used at the provincial and national levels. For example, the data could be sent from one level of government to the next on floppy disks. If necessary, to improve efficiency, microcomputers could be networked at any level of government. It appears that the computerization of the vital registration system in Indonesia could be done in a relatively short

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5 For further information on the use of computers in vital records system see: Computers System for Vital Registration and Statistics, R.D. Nashold, Madison, Wisconsin, USA, 1985
time frame and at very reasonable cost. Such use of microcomputers will represent a significant advance in the processing of vital data within a decentralized system.

The major problem from such a system should not be technological but rather will remain that of obtaining birth and death information from the public and from the village level of government. The microcomputer technology should be explored as a tool for comparing reporting from various jurisdictions at comparable levels so that the most delinquent areas could be reminded, at least by letter, that they are not performing well. Standard letters for this purpose could be produced on word processors. If this occurs it would demonstrate that there is concern for complete reporting of births and deaths all the way to the national level.

Recommendation: Proceed with the application of microcomputer technology to the decentralized vital records system in Indonesia.

Projects for West Sumatra

It is to be noted that in Indonesia, births and deaths are to be manually recorded into registries at the village (desa) level. Individual records of events are also supposed to be produced with the original going to the family and copies to the village and sub-regency (kecamatan). Information is now obtained by manual summaries being passed up to the higher jurisdictional levels. Obviously, events must either be recorded at the desa level, or counted at the kecamatan level or estimates of the number of events must be made at some level of government. Once a summary number is passed up to the next governmental level, it may no longer be known whether the total number is based on an actual count or on an estimate.
In West Sumatra, there are plans to obtain a microcomputer for installation at the provincial level and three for use at the regency (kabupaten) level (see appendix A). These computers would be used to process community health center (puskesmas) data and birth and death data. A plan has also been developed for implementing the recording and reporting of vital events in one city and two regencies (See appendix B).

Because recording of births and deaths occurs at the desa level and counting occurs at the desa or kecamatan level, it is most advisable to establish projects at these levels to improve reporting, to check the accuracy of what is being reported and to propose data uses. New portable microcomputer technology can now be applied to such studies.

A portable battery operated computer such as the Hewlett Packard 110, Data General I or Morrow Pivot II could be taken into each desa in an area in order to enter the lines from the birth and death registries kept by the head person (kepala desa or lurah) or data could be entered from individual records if they are available. The data would be entered into the computer along with the identity of the area. One, two or three years of data could be entered to be sure of obtaining enough events for analysis. When this is done, the data could be analyzed by calculating the appropriate rates allowed by the data. Logical cross-tabulations could also be done to provide additional information. Comparisons could then be made between areas to see which areas appear to be doing well, average or poorly. If there is any benchmark data for the area obtained by special survey, the village data could be compared to it to provide an estimate of underreporting. The results obtained could also be compared to the data available from the kecamatan or kabupaten to see if reports are being filed and filed accurately. The results would also be shown
to the kepala desa or lurah in each area to demonstrate that there is interest in the information being recorded. This could become a good means of stimulating better performance at the village level. The person doing the data entry in the village could also serve as an unofficial field worker for vital registration. This person could, for example, become very helpful in the development of a field manual for vital registration and in recommending possible changes in the content and format of the registries being kept.

Field work in vital registration is considered a necessity in many countries for sub-national jurisdictions.

When resources become available, medical, nursing and other students have been used to carry out special surveys that determine the number of births and deaths in a given area. These surveys start with the records kept by the village head, then seek to check on completeness of reporting by interviewing all families or a sample of all families in a given area. These surveys should be encouraged both as a means of obtaining data and as a means of stimulating improved reporting.

Recommendation:
Develop projects that can obtain data and stimulate improved reporting at the village level.

It is apparent that commitment is needed at the most dispersed levels of the vital registration system as well as in Jarkarta in order to succeed in building an effective system of vital registration for Indonesia.
SUMMARY OF RECOMMENDATIONS

- Establish or revitalize a national committee for vital and health statistics to encourage the national reporting of uniform minimum basic data sets for vital and health statistics.

- Establish or revitalize vital and health data advisory committees at the provincial level to make recommendations for appropriate data activities at this level.

- Add birth weight to the standard Indonesian live birth form as soon as possible. The data should be tabulated in no fewer than three categories. These are below 2000 grams, 2000-2499 grams and 2500 grams and above.

- Abbreviated cause of death lists should be used throughout Indonesia. Currently, as a beginning, it would be most practical to use a list of no more than ten cause groups for medically unattended deaths and a larger list of cause groups for medically attended deaths. These groupings should be consistent with the International Classification of Diseases.

- Special emphasis should be given to the collection, tabulation and distribution of infant and maternal mortality data. It should be widely used in efforts to obtain better medical care in Indonesia.

- Proceed with the application of microcomputer technology to the decentralized vital records system in Indonesia.

- Develop projects that can obtain data and stimulate improved reporting at the village level.
APPENDIX A

SITUATION OF DATA UTILIZATION AT THE PUSKESMAS AND REGENCY LEVELS IN WEST SUMATRA, INDONESIA, 1985

Dr. Paramita Sudharto,
Mrs. Herawati

Minor edits have been made in the translation of this paper from Indonesian.
I. OBJECTIVES OF ASSIGNMENT

In the near future several levels of the Kanwil Department of Health for the Province of West Sumatra will use a computer for processing data related to health. According to plan, the computer will be installed in one office at the provincial level and three offices at the regency level. The computer will be debited to P2KTP in the supply budget.

In connection with the above matter, we have been assigned to provide technical assistance on utilizing the data which will be more easily obtained by the computer. The purpose of our visit is as follows:

1. Explore how far the data available at the Puskesmas and regency levels have been used for operational purposes.
2. Assist the province in working out the next steps aimed at intensifying the utilization of data at Puskesmas, regency and provincial levels.

II. ACTIVITIES CONDUCTED

To explore data utilization at the Puskesmas and regency levels, we have visited some Puskesmas, regencies/municipalities and one village.

* The regency visited is the one which has been developed by the P2KTP I Project, namely the Regency of Pesisir Selatan, Municipality of Payakumbuh and Regency of Lima Puluh Kota. At those places, meetings and discussions have been conducted with Regent/Mayor and staff and with Dokabu/Dokodya and staff.

* The Puskesmas visited are: Empat Jurai, Ibuh, Situjuh and Taram. At each Puskesmas, discussions are conducted with the Puskesmas head and staff.
To study the collection of birth and mortality data at the village level, one village has been visited, namely Koto Tengah in the Municipality of Payakumbuh. On that occasion, discussions are conducted with the village chief and all health cadres (PKMD) available in the village.

At the provincial level, meetings are also conducted. The first meeting takes place on the first day of the visit to explain the purposes of the visit and to provide "feedback" with the data we have received from the Province (The data have been tabulated into a Provincial Statistical Profile). The meeting is attended by Heads of Bidang and staff of PPE Bidang within the Kanwil Depkes, and Heads of Sub Dinas/representatives from the Provincial Health Services.

The other two meetings are conducted after visiting the regency and Puskesmas in order to discuss the results of the visit and to work out the next steps.

III. SITUATION

1. The data at the Puskesmas level have been used for operational purposes. The data are generally used as a basis for planning and evaluating activities.

2. The data are frequently used for immunizations, both for babies and pregnant mothers. This is because the target given by the regency or province cannot be achieved; therefore, the Puskesmas collects data to use as a basis for finding additional babies or pregnant mothers and as a basis for argumentation with the regency and province, if the coverage does not achieve the target.
3. The data are collected from available registers or reports or they use separate forms to obtain the necessary information.

4. The following are some samples which we were able to collect from some Puskesmas. They include some utilization data.

   a. Data for determining counselling on immunization

<table>
<thead>
<tr>
<th>Village unit</th>
<th>Total pop.</th>
<th>Total preg. mother (± 4.4%)</th>
<th>Total mothers obtaining TT I</th>
<th>Total babies (± 3.5%)</th>
<th>Total Babies obtaining DPT I/BCG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Priorities are given to the areas which have low levels of coverage for counselling purposes. The villages which have coverage of over 100% will be reviewed to see whether the estimation has been properly conducted.

   b. Data for determining implementation of immunization

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Name of vac. post</th>
<th>Total pop. per post</th>
<th>Impl. of Immunization</th>
<th>Target ≠</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   The data are used for implementation of immunization programs. The Puskesmas officers can immediately identify the place, data and estimate of the target population so that preparation and counselling can be done more easily.
c. Data on birth by village. The data are used to identify the actual target for immunization

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Total Pop.</th>
<th>Births by month</th>
<th>Total births within one year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td></td>
</tr>
</tbody>
</table>

The above form is the recapitulation of incoming reports at the village level. Reports at the village level are collected each month.

d. Report on data at the village of . . . . . for the month of . . .

<table>
<thead>
<tr>
<th>Name of household head</th>
<th>Birth date</th>
<th>Helped by</th>
<th>Sex</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Death date</th>
<th>Name of household</th>
<th>Name of deceased</th>
<th>Sex</th>
<th>Causes of death</th>
<th>Place of death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both reports mentioned above (d and e) are prepared by different persons. The officers vary as follows:

- cadres of PKMD - trained traditional midwives
- health officers (in the near vicinity of Puskesmas)
- PLKBs - village chiefs.
f. Data on diseases by village

<table>
<thead>
<tr>
<th>Disease</th>
<th>Village</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>01 02 03 04 05 and so on</td>
</tr>
</tbody>
</table>

The above data are used to see which villages are high for particular diseases, so that the data can be used to determine the counselling schedule of the Puskesmas (mobile unit) and project villages.

The data are taken from the clinical treatment records; they are transferred to an index of diseases and then recapitulated. It takes a long time, because the work is difficult.

The diseases mentioned in the last recapitulation are the ones which are most frequently found.

g. In February a kind of census (recording) was conducted in each village of the Regency of Pesisir Selatan to determine the total number of inhabitants, eligible couples, babies, children under five years old, etc. The Main Book on Population, which is available in each village, was used. The purpose of this census was to obtain the actual baseline data from each village. The data will be used for planning purposes particularly for the five integrated programs, namely; Family Planning, Immunization, Diarrhea, Nutrition and Mother and Child Health. The funds for the census were obtained from Family Planning at
the village level (BKKBN) and the PKK of the Pesisir Selatan Regency. From each village, eight persons were upgraded, including the village chief, the health section, LKMD, and the other formal leaders for the implementation of the census.

5. Most of the data at the regency level are used to monitor activities at sub district levels for "feedback" in monthly meetings of puskesmas doctors at the regency level. Basically, the incoming reports at the regency level can be divided into two parts: 1) reports which comply with regulations from the central government, and 2) reports which are requested by the provinces.

The interviews conducted with doctors of the regency/municipality indicate that reports determined by the central government insufficiently reflect the situation at the Puskesmas, because the reports are aggregated data.

6. At the regency level, data are also used to a limited extent for planning purposes, particularly for distribution of medicines to each Puskesmas.

The medicines are distributed on the basis of the number of visits and the ten most prevalent diseases at the Puskesmas level.

IV. RECOMMENDATIONS

As a follow-up to the visit, we are herewith submitting work plan proposals which are basically intended to improve the utilization of data, at the puskesmas, regency and provincial levels.

1. Meetings at the puskesmas level.
a. Objective

To reach consensus that the data needed are in accordance with utilization, namely the operation of the puskesmas.

b. Background

It is understood that the data collected at the puskesmas level are enormous and actually only a small proportion are properly used for operational purposes. The visits to the puskesmas have shown that each puskesmas has developed its own way of utilizing the data. The data are mostly used to determine coverage, counselling areas, preparation of work plans, etc. It is obvious that they do not work only on the basis of the target set by the province/regency.

In connection with this matter, we intend to hold meetings at the puskesmas level in order to obtain the data needed for operational purposes. This will facilitate data processing at the regency level (by computer) which will give feedback to the puskesmas.

c. Participants.

1. Sub district Puskesmas CHIPPS 7
2. Puskesmas from regency/municipality 11
   non CHIPPS 18 Puskesmas

From each puskesmas, two participants are taken, namely a doctor, and a staff person involved in data processing.

* Provincial participants
* Central participants - 3 (three) persons

d. Duration of meetings: 4 (four) days

e. Place and time: Padang, end of April 1985

f. Forms of meetings: - providing input on data utilization
   - group discussions
2. Meetings at regency/municipality level.
   a. Objective
      To reach a consensus that the data needed are in accordance with utilization and for operational purposes at the regency/municipality level.
   b. Background
      The data collected at regency/municipality level are enormous, because they are from the puskesmas by working areas. The data are mostly used for monitoring/supervising activities at puskesmas level. It is hoped that a consensus will be reached concerning the data needed at the regency/municipality level. This will facilitate data processing at the provincial level (by computer) which will provide feedback to the regency.
   c. Participants
      - Regency/municipality CHIPPS 3
      - Regency/municipality non CHIPPS 7
      \[10 \times 2 = 20 \text{ persons}\]
      * provincial participants:
      * central participants: 3 persons
   d. Duration of meetings: 3 days
   e. Place and time: Padang, early May, 1985
   f. Forms of meetings:
      - provide input on the data needed by the Puskesmas, etc.
      - group discussions

3. Training of computer technicians.
   The plan and cost of this activity are included in the Central funds.
4. Training of puskesmas personnel to improve "Responsiveness" to community needs.

5. Seminar on "Appreciation of Data" at the provincial level.
   a. Objective.
      To intensify data utilization by decision makers at the provincial level.
   b. Background
      The computer at the provincial level will enable decision makers to obtain/use data for their interests. In connection with this matter, a one-day seminar will be conducted to intensify the data utilization.
   c. Participants.
      Heads of Bidang and Sub Dinas as well as the Administration Section totalling about 15 persons.
List of Officials Met

At Provincial Level

1. Head of Kanwil Depkes : Dr. Rafki Ismail, MPH
2. Head of Planning : Dr. Bachtiar Karatu, SKM
3. Head of Data Collection and Processing Section : Dr. Henry Gunawan
4. Head of Manpower Data Section : Dr. Saif, SKM
5. Head of KIA Sub Dinas : Dr. Nurbayit, MPH
6. Head of P2M Sub Dinas : Dr. Zainal
7. Head of Sanitation Sub Dinas : Dr. Nasrin Iskandar
8. Head of PKM Sub Dinas : Dr. Sjauhani
9. CHIPPS Consultant : Dr. Roger Feldman
10. CHIPPS Project Secretary/Treasurer: Remfil, SKM

At Regency Level

1. Regent of Lima Puluh Kota
2. Dokabu of Lima Puluh Kota : Dr. Sjamsir
3. Puskesmas doctor (Head of Puskesmas)
   - Puskesmas Situjuh : Dr. Rosmaini
   - Puskesmas Taram : Dr. Sinardi

Payakumbuh Municipality

1. Mayor of Payakumbuh Municipality
2. Dokabu : Dr. Nurul Syamsu
3. Puskesmas doctor (Head of Puskesmas)
   - Puskesmas Ibuh : Dr. Ani
4. Head of Kato Tengah Nan IV Village
APPENDIX B

IMPLEMENTATION PLAN FOR RECORDING AND REPORTING
STATISTICS IN KOTAMADYA PAYAKUMBH, KABUPATENS LIMAPULAHKOTA AND
PESISIR SELATAN

Dr. Linda Taufik
Implementation Plan for Recording and Reporting Vital Statistics in Kotamadya Payakumbuh, Kabupaten Limapuluhkota and Pesisir Selatan*

Dr. Linda Taufik

Abstract:

The recording and reporting of vital statistics, particularly of live births, stillbirths, and other mortality has been carried out in West Sumatra by using forms A3, A4, A5 produced by the regional government (Pemda). Two kabupatens and one kotamadya have been selected to work specifically on the improved reporting of births and deaths, utilizing these forms with some modifications.

The utilization of these data by health offices in West Sumatra has not yet developed as the basis for health planning. The main goal of this project is to use births, stillbirths, and mortality rates, particularly infant and maternal mortality rates because they are sensitive indicators of community health status. These should become the basis and guide for health planning by health officials in West Sumatra in general and in the two kabupatens and one kotamadya in particular.

* Minor edits have been made in the translation of this paper from Indonesian.
Objectives:

1. Improve the reporting system using data already received by the Pemda with the addition of some items important for health planning.
2. Use regular government channels (lurah, camat, bupati, etc.) for reporting.
3. Develop a uniform method of data collection and reporting, starting from the village level, to obtain useful data on births, still borns, and infant and maternal mortality.
4. The uniform method, once developed, should then be used in other kabupatens and kotamadyas in West Sumatra.
5. Collected data can be used in the village, puskesmas, kabupaten and province, and will improve possibilities for health planning by all levels of the health department and family planning agency (BKKBN).

Main steps in project development:

2. Propose additional items to be recorded, obtain permission, and encouragement from the Governor's Office.
3. Develop kabupaten meetings, using data from the kabupaten itself.
4. Organize kabupaten meetings with participants from kecamatan consisting of camat and staff, puskesmas doctor and staff, PPLKU and staff and others from the kabupaten.
We plan to use Payakumbuh for the meeting of Kabupaten Limapuluhkota and Kotamagya Payakumbuh, and Painan for the meeting for Pesisir Selatan.

Objectives for the meetings:

1. Agreement on method of work and rules for each kecamatan team, rules for the camat, rules for puskesmas personnel and rules for PPLKB.
2. Agreement from the puskesmas concerning data collection; whether all or part of the following data will be collected in their area.
   - perinatal mortality rate and causes
   - neonatal mortality rate and causes
   - infant mortality rate and causes
   - balita mortality rate and causes
   - maternal mortality rate and causes
3. Agreement from the puskesmas about who will check the causes of mortality and the areas to be used.
4. Prepare a plan of action for each puskesmas
5. Agree on the rules of action for recording events.
6. Develop an implementation plan of action for each puskesmas.
7. Plan how to report data to various involved offices.
8. Discuss feedback to be given by the kabupaten and province.
The specific outcome expected is that these data will be used in health planning at all levels, from the village through the province. To have this action done well there has been a policy determined by Keppes no. 52/1977. The short term evaluation of this project will be to review the completeness, and accuracy, of data tabulations, utilization of the reporting system, and ease of data collection in the two kabupatens and one kotamadya. The long term evaluation will include efforts to measure whether the health planning efforts at the village, kecamatan, kabupaten and province levels have used the collected information.

USAID funds are available to support some activities. However, agreement concerning manpower resources, and the duration and methods of work are essential elements to ensure the continuity of the project.

Moral support from the Pemda and active participation of the Pemda offices and BKKBN at each level are important. The interest and the willingness to work of each health office are equally important.