

PRE-PREGNANCY HEALTH SERVICES IN TAIWAN

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I. General

The Population of the Taiwan Province is now reached to 11 million with the density of more than 300 per square kilometre. The increase of the population is still with the high rate of about 31 per thousand in 1961. The fertility rate of the women between the ages of 10 to 49 in Taiwan is about 155 and the children born with the birth order from the first to the third in the year of 1957 are as low as 53.4% of the total birth. Some statistical data are shown in the following table.

Table 1. Some statistical data in Taiwan
1960

Population	10,800,000	Birth:	37.18°/°°
Age below 15	45.44°/°	Death:	6.83°/°°
Women 15 - 44	19.95°/°	Infant Mortality Rate	37.2°/°°
Population Density	300/Sq. Km	Maternal Mortality Rate	1.12°/°°

The fertility rate is highest among the women between 25-29 and the women between 40-44 still show the rate of as high as 73. Table 2 shows the fertility rate of various age-group in Taiwan with comparison of some other countries.

Table 2. Age Specific Fertility Rates in Taiwan
1955 and 1960

	<15	15-19	20-24	25-29	30-34	35-39	40-44	45<	All Ages
1955	0.1	50.3	272.8	340.8	295.0	218.6	102.9	25.1	160.2
1960	0.09	49.4	251.1	330.3	251.3	166.4	77.5	12.6	142.7

USA (1957)	0.9	94.6	254.8	198.4	116.6	59.8	15.7	1.0	89.0
Eng & W (1957)	0.0	29.6	152.6	157.3	91.4	46.5	12.2	0.8	58.3
Japan (1957)	0.0	4.3	99.3	169.6	89.8	35.6	8.3	0.6	54.2

It has been felt necessary that mothers in the Province should be taught about the knowledge of planned parenthood. It was decided that this activity would be better to be included in the maternal and child health services which are now being carried out widely in the province. The activities have been carried out in the health organizations since March 1960 and the main functions have been as follows:

1. Set up pre-pregnancy health clinics in Provincial hospitals.
2. 8 experimental areas in Nan-tou County with one full time worker in each area for home visits and other activities.
3. Training of working personnel:
 Firstly a team consisted of one medical officer, one obstetrician and one senior midwife was sent to Japan for the observational training for two months.
 Then the working personnels in health and other organizations have been receiving training in this field by this team.
4. Preparation of education material.
5. Survey and study in this field.
6. Expansion of areas in the whole province in cooperation with the local farmer's Association.
7. Establish Population Studies Center.

II. Main Functions

1. Pre-pregnancy health clinics in Provincial Hospitals. The pre-pregnancy health clinics in the provincial hospitals have been set up during the month of March 1960 to May 1960. The MCH Institute also started a clinic once a week since July 1960. and every day wish one evening of Thursday since July 1962. By August 1962 total of 832 cases accepted the services. Taichung, Ping-tung, Yi-lan, Tainan hospitals and MCH Institute are the places of conducting the services actively.

(Please refer Annex 1)

The chief method used in these hospitals are intra-uterine ring (26%) , condom and condom with others (19%) , Ligation (17%) , and diaphragm and diaphragm with others (1.5%)

2. 8 areas in Nan-tou County started the services since April 1960. One full time midwife in each area has been employed for home vists and other activities. By December 1961 total of 1575 cases have been taken care of by these midwives. Nantou County hospital also conducting the services. The chief method used by the people in these area are condom (40%) and foam tablet (33%)

These 8 demonstration areas are now involved in the expanded program for

the whole province and are not considered as particular areas anymore.

3. Team consisted of Drs. J. Y. Peng, T. S. Su and Miss T. Y. Huang spent 2 months in Japan from September to November 1960 for observational training. After the return of the team many personnel in relation to this field have been trained. The main courses have been 13 courses with 413 of local farmer's Association personnel, 18 courses with 352 health station nurses and midwives and 5 classes with 144 full time employees to the health stations in this particular activities.

(Please see Annex 2)

The contents of the training course are shown in Annex 3.

4. Preparation of education material:

The following education materials and working manual have been prepared by the institute by December 1961. These have been very useful in conducting the services.

CHARTS.

"PHYSIOLOGY OF PREGNANCY" flip charts one set.

"METHODS OF PRE-PREGNANCY HEALTH" flip charts one set.

LEAFLETS:

"INTRODUCTION OF PRE-PREGNANCY HEALTH" one leaflet.

"METHODS OF PRE-PREGNANCY HEALTH" 10 sets leaflets.

"DO-YOU-KNOW ?" leaflet for intrauterine contraceptive coil.

FILMSTRIP:

"PHYSIOLOGY OF PREGNANCY" colour one set.

"METHOD OF PRE-PREGNANCY HEALTH" colour one set.

WORKING MANUAL: (For workers:)

"PRE-PREGNANCY HEALTH SERVICES"

5. Survey and study:

The following reports and papers have been made as the activities progress.

- a. Report of the observational training in Japan. (Observation of Public Health and Family Planning Services)

March 1961

- b. Some Facts on the Application of the Contraceptives Among People in Central Taiwan.

December 1960

The Taiwan Public Health Journal, Vol. 1, No. 2, July 1961.

- c. Report of a survey on the use of intra-uterine ring as a contraceptive method among obstetricians in Taiwan.

Feb. 1961

The Taiwan Public Health Journal, July 1961.

- d. Report on the Result of Pre-pregnancy Health (Family Planning) Services in Nan-tou Hsien.

January 1962

Reported at Taiwan Medical Association Meeting

- e. Some observation on the use of intra-uterine contraceptive ring in Taiwan

(China.)

April 1962.

Presented at the New York meeting on Intra-uterine contraceptive Devices. April 30 - May 1, 1962.

f. Prepregnancy health services in Taiwan.

September 1962.

6. Expansion of areas for pre-pregnancy health services in cooperation with the local Farmer's Association.

The Provincial Farmer's Association requested the Institute to train both the chief of agricultural extension division and home economics instructor from selected local farmer's association for the conduct of the pre-pregnancy health services in cooperation with local health stations. 53 areas have been covered during 1960 and 67 for 1962. The training was conducted by the team from the institute, mostly at the Tien-mu training centre of the Association and other places. Altogether 413 personnels from 120 areas have been covered. The full time pre-pregnancy home visitors for health stations have been employed and trained since October 1960 and including Nan-tou area there are 124 full time personnels working in health stations in close relation with local farmer's association at the moment.

Total of 15,569 cases have been taken care of by these visitors since November 1961 by the end of August 1962.

The main method used by these cases are foam tablet (47%) , condom and condom with others (33%) , and jelly (11%) ,

(Please see Annex 4)

7. Establishment of Taiwan Population Studies Centre.

The plan became focus after the second visit of Dr. Balfour to Taiwan in 1959 that a Population Studies Centre would be established in Taiwan by the assistance of New York Population Council. This plan has been initiated and supported by Commissioner Chiang and Dr. S. C. Hsu of JCRF and welcome by Governor Chow of Taiwan Province and Dr. C. H. Yen of Provincial Health Administration.

The further arrangement was brought up when Drs. Notestein and Kirk visited Taiwan in September 1961. The Population Studies Centre has been established in association with the Taiwan Provincials MCH Institute in Taichung. Three agencies are supporting the work of the Center: The Provincial Health Administration of Taiwan, The Population Studies Center of University of Michigan, and the Population Council. Dr. C. H. Yen, the Director of the MCH Institute, and Dr. Ronald Freedman, the Director of the Michigan Population Studies Center are the Director and the Co-Director of the Studies Center. Dr. J. Y. Peng and Dr. Yuzuru Takeshita are the Chinese Associate Director and the American Associate Director.

The activities of the centre have been started since September 1961 with the following aims.

- a. To undertake first-hand studies of demographic phenomena in Taiwan.
- b. To analyze the demographic trends in Taiwan from secondary sources.

- c. To assess the effectiveness of the family planning programs sponsored and carried out by the Maternal and Child Health Institute.
- d. To train local personnel in demography and in the related social sciences.

The large scale action program, has been planned during the visit of Dr. Berelson, Director of Communication Research Program of the New York Population Council, in Taiwan and this program is going to be inaugurated in near future.

ANNEX 1

PRE-PREGNANCY HEALTH ACTIVITIES IN HOSPITALS AND CENTERS

August 1962

Name of organization	Methods										Total Case	Remarks
	Condom	Foam tablet Condom & others	Jelly	Diaphragm	Diaphragm & others	Rhythm period	Coitus interruptus	Intrauterine ring and other devices	Vasectomy	Ligation		
Keelung Provincial Hospital	4	1		7				12	38		62	Started March 1960
Taipei Provincial Hospital	6			4				16			26	Started May 1960
Hsinohu Provincial Hospital	3		2						2	2	9	Started Feb. 1960
Tainan Provincial Hospital	7	3	3	2				26	1	35	77	Started May 1960
Penghu Provincial Hospital	8										8	Started Aug. 1960
Pingtung Provincial Hospital	22	8	5	15	11	10	1	9	46		127	Started Apr. 1960
I-lan Provincial Hospital	2	2	3	1	1	4		76		6	95	Started Apr. 1960
Hualien Provincial Hospital	1	1	5	9	4			6	8		34	Started May 1960
Taitung Provincial Hospital	11	3	10	3							27	Started Apr. 1960
Taichung Provincial Hospital	25	15	21	15				28	4	53	161	Started Dec. 1959
M. C. H. Institute	21	29	24	4	2	45	2	30		15	172	Started July 1960
TOTAL	116	45	57	60	59	68	3	214	1133	76	832	

NOTE: Number accumulated from the start of the services.

ANNEX 2

Training on Pre-pregnancy Health By MCH Institute

September 1962

Year	Month	Farmer's Association				Health Station Nurses & Midwives							
		No. of class	Duration of each class (days)	No. of trainees	Place	Personnel	Remark	Month	No. of class	Duration of each class (days)	No. of trainees	Place	
1960	Dec.	2	3	48	Tenmo	Chief, extension division		March	1	2	31	Nantou	
								July	1	1	31	Nantou	
								Jan.	1	3	27	Tainan	
								Jan.	2	3	54	Tenmo	Instructor, home economics
								Jan.	1	1	25	Neilsin	County instructor, home economics
								Feb.	1	1	45	Tenmo	Instructor Agriculture extension
1961	Sept.	1	1	45	Taichung	Instructor, Agriculture extension		March	5	2	46	Changhua, Taipei I-lan, Pingtung Kaohsiung	
								Nov.	2	3	60	Tenmo	Chief, extension division
								Nov.	2	3	81	Tenmo	Instructor, home economics & Supervisor of County Farmer's Association
								Nov.	1	1	45	Pingtung	Instructor, extension
								Nov.	1	1	45	Pingtung	Instructor, extension
1962	July	1	1	55	Taichung	Extension worker local Farmer's Association		May	3	2	25	Hualien, Taitung Taoyuan	
								TOTAL	13		458		

September 1962

(Continue)

Full time P.P.H. Worker to Health Station				
Month	No. of class	Duration of each class (days)	No. of Trainees	Place
March	1	2	9	Nan-tou
July	(1)	(1) Refresher	(9)	Nan-tou
Feb.	(1)	(2) Refresher	(9)	Nan-tou
Oct.	1	3	29	Taichung
Dec.	1	3	20	Taichung
April	2	3	48	Taichung
July	1	3	38	Taichung
	6		144	

ANNEX 3

**CURRICULUM FOR THE TRAINING OF FULL TIME
P. P. H. WORKERS FOR HEALTH STATIONS**

(3 days, 24 hours)

A. <u>Theory</u>	Hour
1. Relationship between MCH and PPH activities	1
2. Anatomy of male and female reproductive organs	1
3. Physiology of pregnancy	1
4. General introduction on PPH technic	1
5. Various methods of PPH technic and demonstration	3
6. Health education on PPH services	1
7. Record keeping and report	1
8. Use and analysis of PPH records	1
9. Home visits on PPH services	1
10. Planning and organization of PPH work in the local community	2
11. Film show	1
Total	(14)
B. <u>Practice</u>	
1. Return demonstration of PPH methods	2
2. Return demonstration on group teaching on PPH services	2
3. Home visits	2
Total	(6)
C. Discussion meeting	(4)

ANNEX 4

PRE-PREGNANCY HEALTH ACTIVITIES IN HEALTH STATIONS

August 1962

Name of organization	Methods										Total Case		
	Condom	Condom & others	Foam tablet	Jelly	Diaphragm	Diaphragm & others	Rhythm period	Coitus interruptus	Ring	Vasectomy		Ligation	Others
I-LAN HSIEN	I-lan Shih	14	17	105	36		2	1	1	1			177
	Tou-cheng Chen	10	19	50	14		11						104
	Chuang-wei Hsiang	20	12	59	15			4				1	111
TAIPEI HSIEN	Hsin-chuang Chen	43	10	80	8	44							185
	Pan-chiao Chen	42	33	59	23		4					6	167
	Shu-lin Chen	35	3	95	27	3	6	2		1			172
	Shui-fang Hsiang			22				8		1			31
TAOY- UAN HSIEN	Tao-yuan Chen	34	35	152	43		1	1					266
	Hsin-wu Hsiang	65	6	59	25	1		40		1			198
	Ta-yuan Hsiang	72	4	65	8	2	4		3		1		159
	Kuan-yin Hsiang	38	1	84	42			10		2			184
	Yang-mei Chen	27	1	44	49		1					6	128
HSIN- CHU HSIEN	Hsin-pu Chen	56	21	106	17	1		1	1	1		5	209
	Chu-tung Chen	29	7	93	24			1		2			156
MIAOLI HSIEN	Miao-li Chen	163	66	33	8	2	44	2	3	1		3	324
	Yuan-li Hsiang	33	13	63	1	5	11	12		2			140
	Tou-fen Chen	29	23	121	11			2					186
	Kung-kuan Hsiang	89	37	22	39	1	2	8	1	8		3	210
	Ta-hu Hsiang	38	13	30	20	2		2					105
	Tung-hsiao Chen	26		39	5	13						10	93
	Cho-lan Hsiang	49	1	19	5			2	4	1			81
TAIC- HUNG HSIEN	Ta-chia Chen	1	1	24	7		1			1		2	37
	Ta-ya Hsiang	31	12	58	7			6		2			116
	Shan-kang Hsiang	35	2	83		1	1	6		4			132
	Ta-li Hsiang	28	40	70	7	3		4		6	1	1	160
	Wu-feng Hsiang	10	2	100	3			15		34			164
	Hou-li Hsiang	8	4	66	17								95

NOTE: Number accumulated from the start of the services.

(to be con't)

Name of organization	Methods											Total Case		
	Condom	Condom & others	Foam tablet	Jelly	Diaphragm	Diaphragm & others	Rhythm period	Coitus interruptus	Ring	Vasectomy	Ligation		Others	
CHAN-GHUA SHIEN	Chang-hua Shih	17	12	72	9		2						112	
	Tien-chung Chen	40	47	108	19	1						2	217	
	Hua-tan Hsiang	54	8	30	37	3	1	1					134	
	Chi-hu Chen	3	7	45	6				4				65	
	Yuan-lin Chen	48	39	19	7								113	
	Erh-lin Hsiang	7		24									31	
	Fu-hsing Hsiang	6	1	28	26								61	
	She-tou Hsiang	9	4	51	2		3						69	
Pu-yen Hsiang	13	2	88	63	1		1		4			172		
YUNL-IN HSIEN	Hsi-lo Chen	41	20	124	12	1	6			1			205	
	Tou-nan Chen	12	33	63	8							2	118	
	Tu-ku Cher	54	8	112	6			9				1	190	
	Erh-lun Hsiang	48	19	69	16			2				21	175	
	Tou-liu Chen	26	7	50	6			3					92	
	Ta-pei Hsiang	14	9	24	34								81	
	Shui-lin Hsiang	30	14	37	4							2	87	
	Mai-liao Hsiang			38										38
	Tai-hsi Hsiang	2		29										31
	Szu-hu Hsiang			33										33
Pei-kang Chen			70				7	3	6				86	
CHIA-YI HSIEN	Chia-yi Shig	28	36	129	35		4					1	233	
	Ta-lin Chen	12	15	99	57							1	184	
	Pu-tze Chen	23	12	54	61		2			5		8	165	
	Min-hsiung Hsiang	47	47	69	23	1	1						188	
	Hsin-kang Hsiang	41	20	121	21								203	
	Chi-kou Hsiang	5	3	55				6		10		1	80	
	Mei-shan Hsiang	11	3	42	11					4			71	
	Tai-pai Hsiang	2	7	53	2			10					74	
	Chung-pu Hsiang	9	6	34	22								71	
	Lu-chio Hsiang	9	6	51	5		1	1					73	

Name of organization	Methods										Total Case			
	Condom	Condom & others	Foam tablet	Jelly	Diaphragm	Diaphragm & others	Rhythm period	Coitus interruptus	Ring	Vasectomy		Ligation	Others	
Yi-chu Hsiang	5	8	56	12		1	6	3					91	
Chu-chi Hsiang			33										33	
Tung-shih Hsiang			34										34	
Pu-tai Chen			35										35	
TAIN-AN HSIEN	Hsin-ying Chen	64	31	134	30		19	3					281	
	Ma-tou Hsiang	68	20	75	17	9	12	3		3			207	
	Hsin-hua Hsiang	41	26	106	9	1	13						196	
	Hsia-ying Hsiang	180	7	273	108	15	2						585	
	Hsin-shih Hsiang	31	17	115	10			1					174	
	Yu-ching Hsiang	57	66	102	15	2	5						247	
	Kuan-miao Hsiang	4		26										30
	Kuei-jen Hsiang	39	27	60	9	1	3	6		1		2		148
	Kung-tien Hsiang	2		31				1						34
	Hsueh-chia Hsiang	5		63										63
Jen-te Hsiang	3		25										28	
KAOH-SIUNG HSIEN	Lu-chu Hsiang	36	21	111	38	2	9			7	2		217	
	Kang-shan Chen	60	42	47	5	6	23		9				192	
	Chi-shan Chen	51	13	46	40	3	7	4	3				167	
	Mei-numg Chen	14	3	21	40								78	
	Hu-nei Hsiang	29	2	44	1			3	1				80	
	Tien-liao Hsiang	1	1	71	5							1		79
	Lin-yuan Hsiang	17	2	48	7									74
	Feng-shan Chen	6	21	53	9			2						91
	Hsiao-Kang Hsiang	5	4	9	10		1					1		30
PINGT-UNG HSIEN	Ping-tung Shih	38	5	81	17	5		18	2		1	1	168	
	Chao-chou Hsiang	37	25	55	40			13					170	
	Chang-chih Hsiang	62	13	22	4	1	11	4	1	5			123	
	Wan-luan Hsiang	22	8	135	65	1	1	39	3	2		1	277	
	Nei-pu Hsiang	15	10	51	4								80	
	Wan-tan Hsiang	18	8	32	19							5		82

Nome of organization	Methods											Total Case	
	Condom	Condom & others	Poam tablet	Jelly	Diaphragm	Diaphragm & others	Rhythm period	Coitus interruptus	Ring	Vasectomy	Ligation		Others
Chu-tien Hsiang	47	4	7	1		1	1		2		1	15	79
Chia-tung Hsiang	10	7	30	21									68
Tung-kang Hsiang			37	1					5				43
Heng-chun Chen	3		29										32
TAIT-UNG HSIEN													
Tai-tung Chen	7	9	36	11		6							69
Kuan-shan Chen	34	22	49	15		29		3	3	1	3	2	161
Chih-shan Chen	17	9	36	8				2	5		2		79
HUAL-IEN HSIEN													
Hua-lien Shih	3		35	1	2		1						42
KEEL-UNG CITY													
An-lo Chu	2		26	1			2		5				36
TAIC-HUNG CITY													
Hsi-tun Chu	60	16	39	3	1	22	11		4		1		157
Nan-tun Chu	43	29	57	4	1		11	1	16			3	165
Pei-tun Chu			22				1				1		23
Tung Chu	4		33						3				41
Hsi Chu	3		23						1				27
Nan Chu			30										30
TOTAL	3666	1450	7285	1706	173	446	317	39	265	2	15	205	15,569