MEDICAL SERVICES : BANTU RESIDENTIAL AREAS. JOHANNESBURG. -- DEC 1964 Population and Area. The residential complex houses approximately half a million people in an area of 26 square miles. Structure of Services. Annexure A. Statistical Data. Annexure B. General. The services are in the form of eight general clinics with extensive domiciliary ramification acting as an integrated system with a base hospital (Baragwanath Hospital). The clinics, staffed by an average of 450 personnel operate on a 24 hour basis and are linked by radio communication with each other and with an ambulance control depot which operates its mobiles by radio control. The pending issue of walkie-talkie sets to district midwives will in due course complete the proposed system of radio linkage between midwives on district, clinics, base hospital and ambulances. A charge of 2/6 is made for each attendance at the curative services. 15/- for

A charge of 2/6 is made for each attendance at the curative services, 15/- for full ante-natal cover and district confinement, and 30/- if delivery or surgical intervention in complicated maternity cases has to be undertaken in hospital. No patient is turned away on grounds of inability to pay and charges are waived at the discretion of the medical officer. No charge is made for any of the promotive services or ambulance removals.

#### Curative Services.

These services form an extension of the casualty and outpatient departments of the base hospital. Domiciliary services by doctors and nurses form a major section and cases are treated at home wherever possible to relieve pressure on hospital beds. Nursing staff on domiciliary duties are transported by a Station Wagon service.

A bus ambulance for conveyance of non-stretcher patients operates on a schedule of four round trips a day to clinics and the base hospital permitting transport and return of cases referred from the clinics to the hospital for specialist opinion and investigation.

The domiciliary nursing service follows up cases discharged from hospital.

#### Midwifery Services.

The service is under continuous pressure with over 11,000 district confinements attended per annum. All aspects of ante-natal routine are strictly implemented. Midwives are transported to and from confinements and post natal nursings. Where abnormality presents during the course of labour they accompany their cases to hospital in an ambulance.

#### Dental Services.

A dental clinic is established in one township and subsidiary clinics are conducted at three others.

## Promotive Services.

(a) Immunisation: Routine immunisation against diphtheria, whooping cough, tetanus, poliomyelitis and smallpox is conducted at all clinics. Specific immunisation campaigns are undertaken when necessary.

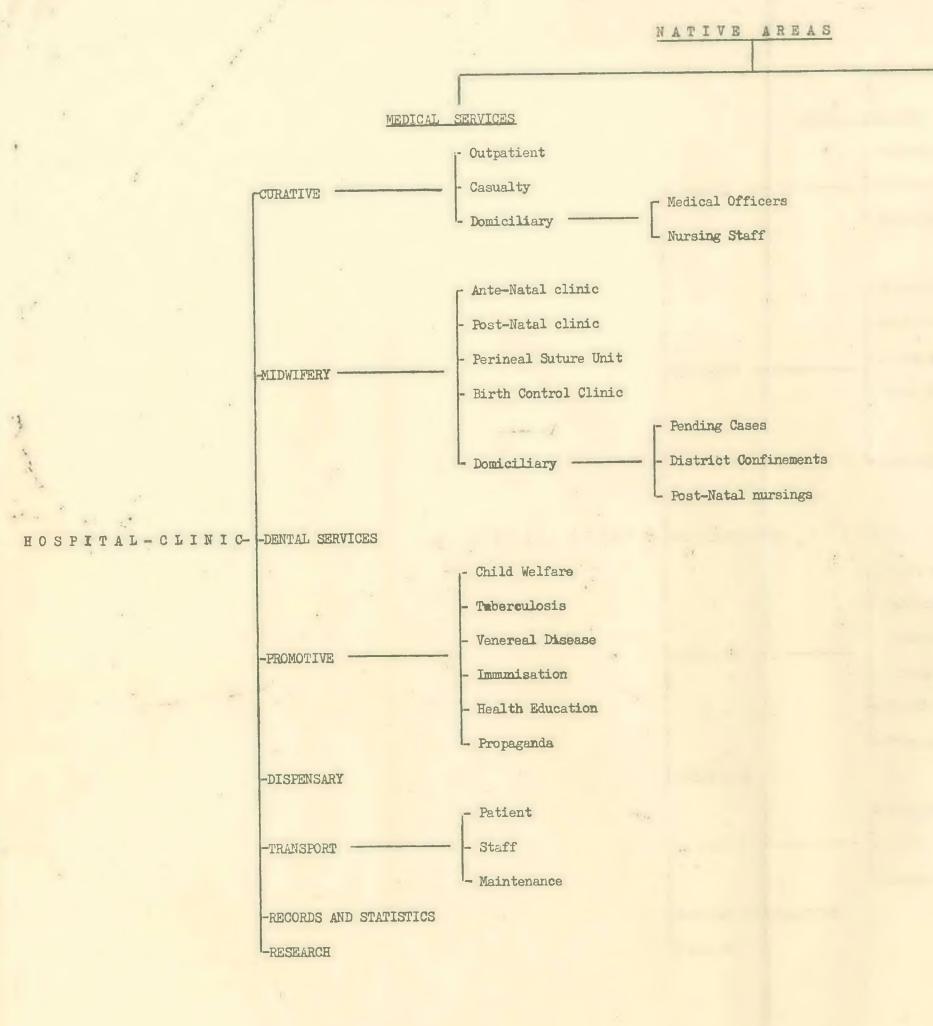
During the current year three feeds of Sabin Oral Trivalent Poliomyelitis Vaccine were fed to children in the susceptible age group 3 months to 9 years. The campaign was conducted by mobile teams operating on a street to street basis. Totals of 83,958, 91,035 and 83,847 children were inoculated in the three feeds representing a success rate of 81%, 90% and 86% of the estimated possible target population. Systematic immunisation of the new born with oral vaccine will commence as established routine by domiciliary teams on 2nd January 1962.

At present an immunisation drive against diphtheria, whooping cough and tetanus is being conducted on a similar basis but with dovetailed coverage of the area by the teams and recorded consent and details of the children inoculated in each household. Children in the age group 3 months to 2 years receive Diphtheria, Whooping Cough and Tetanus Antigens and those in the age group 3 years to 9 years receive Diphtheria and Tetanus Antigens. The first three week phase of the campaign was completed on 15th December 1961 and 80,657 children were injected representing 81% of the potential target in the age group 3 months to 9 years.

- (b) Child Welfare Services: These services are conducted at each clinic with routine examination, lectures and demonstrations to mothers, and home visits by health visitors. Supplementary food rations in the form of powdered milk, mabela porridge and vitamin compounds are issued wherever necessary for which no charge is made. A pilot domiciliary health visitor service to incorporate child welfare as part of its coverage is to be introduced in the early part of 1962.
- (c) <u>Tuberculosis Services</u>. The extensive services include diagnosis, therapy, supplementary feeding, domiciliary treatment, hospital follow-up and social welfare. B.C.G. vaccination is in progress. A mobile 100 m.m. X-ray unit is operative and a modern Tuberculosis Master Clinic is nearing completion.
- (d) <u>Health Education and Propaganda</u>. Information is distributed at clinics and during domiciliary work whilst increasing use is being made of radio broadcasting services, magazine articles and pamphlets. A committee drawn from the African medical staff a doctor, sisters, health inspectors and clerks are affiliated to the Red Cross and assist that body in preparation of filmlets, slides, pamphlets and posters.

#### Research.

Various research projects are undertaken. During the current year a field and laboratory investigation of antibody levels and persistence and protection afforded by bacterial and endotorial typhoid vaccines has been completed, a nutritional survey and laboratory and clinical study of trachoma incidence concluded and likewise an investigation into the causation of a high B.B.A. rate. A research programme in conjunction with the Non-European Affairs Department and various research groups into the psychophysiological and sociological impacts of kaffir beer drinking is proceeding.



ENVIRONMENTAL SERVICES

General Sanitation and hygiene, e.g. control of food supplies, trading conditions, of housing and rodent control.

## ANNEXURE B.

	1960	1961
Total Clinic Attendances	695,522	669,466
Total Home Visits	267,068	265,586
	962,590	935,052
Total District Confinements Attended	11,815	12,135
Number of Cases Removed by Ambulance	72,000	72,799
Dental Treatments	69,659	75,934
Infantile Mortality Rate (Municipal Area)		
1949	1959	ring.
264.16	104.98	_ 92
Maternal Death Rate (Municipal Area)		
1949	1959	-
4.28	1.70	-

## DIPHTHERIA. WHOOPING COUGH AND TETANUS IMMUNISATION CAMPAIGN.

## INTRODUCTION.

- The conduct of 4 feeds of oral poliomyelitis vaccine to the susceptible age groups in the Native Areas has been satisfactorily completed but has delayed a large scale approach to the problem of diphtheria in these areas. The table overleaf is explanatory and clearly indicates the magnitude of the problem and the urgent necessity for large scale immunisation, activity as compared to that achieved by clinic services alone.
- Whooping Cough in the susceptible age groups is likewise a serious problem in the Native Areas.
- The recommendations contained in this report are based on experience resulting from the typhoid, smallpox and four poliomyelitis vaccination campaigns conducted by this section. Modification has been made to meet the demands of different antigens, different methods of administration, reaction to antigens, the necessity for medical officer control of units and numerous other factors. As in previous campaigns simplicity, minimal expenditure, and maximum effect are the aims. The attitude and response of the populace remains one of the various imponderables which can only be assessed to the best of experience.
- Technical details have been presented to Dr. Mason, Serum Laboratories, South African Institute for Medical Research, who is in full agreement with all the technical recommendations made in this report.

## DEFINITION OF OBJECTIVES.

- l. Basal immunisation against diphtheria in susceptible age groups. The upper age limit is to be fixed by assessment of declining susceptibility to the disease and increasing severity of reaction to antigenic stimulation.
- Basal immunisation against whooping cough, the upper age limit likewise being defined by decreasing susceptibility and increasing severity of reaction to antigenic stimulus.
- The simultaneous administration of tetanus prophylaxis because of the opportunity presented for large-scale coverage..
- Effectivity will be greatly increased if a booster campaign is conducted after a minimal interval of 6 months following the last of the three scheduled administrations. Such a subsequent campaign is considered essential.

#### AGE GROUPS.

- 1. The overall age group will be 3 months to 9 years.
- Combined diphtheria, whooping cough and tetanus antigens (D.W.T.) will be given to the age group 3 months to 2 years.
- Combined diphtheria and tetanus antigens (D.T.) will be given to the 3. age groups 3 years to 9 years.

#### ESTIMATED TARGET.

- 1. 103,000 persons in the age group 3 months to 9 years.
- 2. Area composition of target:
  - (a) Bantu in the South Western Native Areas.
  - (b) Bantu in Western and Eastern Native Townships.
  - (c) Coloureds in Noordgesig and those temporarily established in Western Native Township.

## PERIODS OF CAMPAIGN.

- Monday 27th November to Friday 15th December, 1961. Monday 29th January to Friday 16th February 1962. Monday 2nd April to Friday 20th April, 1962.
- 2.
- 3.

Page 2.

DEATHS FROM DIPHTHERIA.

1949/50 - 1960.

NATIVES.

	DEATHS FROM DIPHTHERIA CA							IMMUNISATIONS		
Year	24 hrs. to 11 mths	l year	2-4 years	5-9 years	10 years and over	Total Deaths	NOTIFIED	Completed Courses in Native Townships.	Completed Courses in City Areas.	
1949/50 1950/51 1951/52 1952/53 1953/54 1954/55 1.7.55 31.12.55 1956 1957 1958 1959 1960	527523 232221	12 53 93 4 1 95 71 2	25 17 31 11 12 5 1 5 7 11 7	16 7 15 6 5 6 2 3 5 1 4 7	3 1 3 1 2 - 1 1	61 32 69 32 23 20 6 20 20 22 14 24	419 312 290 269 259 336 108 275 215 252 165 194	6,279 7,844 12,131 5,537	188 578 221 279	
Total	36	71	146	77	13	343	3,094			

## ORGANISATION AND CONTROL.

20

Field Control will be established at Moroka Clinic.

A.M.O.H.(N.A.)

School Team

Modical Officer Liaison

Propaganda

Dr. Coster.

Mobile Units

Mr. Teucho

N.E.A.D.

Supplies

Mr. Boshoff

Mr. Boshoff

Routine diphtheria whooping cough and tetanus immunisations will cease at clinics a month before and during the period of the campaigns: lst November, 1%1 to 20th April 1%2. Private practitioners in the townships will be advised of the campaign. In those instances where mobile units find no parent or guardian to give consent at home, or where nobody is at home, a slip (Annexure A) will be left urging that children be taken to the named clinic serving the area together with the slip for referral to the clinic. Clinics will only immunise those families presenting with such a slip.

## TEAMS CONDUCTING CAMPAIGN.

1. Mobile Teams.

system.

Each mobile team will operate from a van equiped with a public address

							Torst.
Team No.	1	2	3	4	5	6	6
M. O.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	
	Jabour	Gersowsky	Watt	Rothschild	Sheinuk	Matobese	6
S/N	2	2	2	2	2	2	12
Constables (N.E.A.D)	4	4	4	4	B	3	24
Clerks	1	1	1	1	1	1	6
Drivers	1(E)	1(E)	1(E)	1(E)	1(E)	l(NE)	(E) (NE)

2. School and Croche Team.

Transport will be provided by use of the medical officer's car

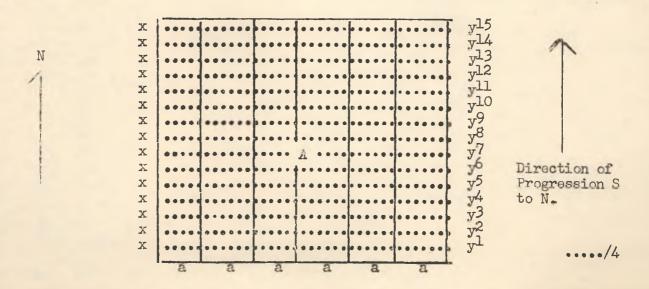
M.O. Dr. Rayd.

S/N 2. S/N Junia S/N Irene

Cases presenting at clinics with referral slips (Annexure  $\Lambda$ ) will be immunised by clinic personnel.

## PROGRESSION OF MOBILE TEAMS.

The following formula was evolved and practised during recent campaigns :



## Page 4.

A = Total area to be covered.

B = Number of houses in total area.

C = Number of teams.

 $\frac{B}{C}$  = Houses per team.

a = Area per team assessed from houses per team.

Houses per Team
Number working
days per phaso
(15)

Level of progression of teams per day based on number of houses per team per day.

(x - y 1 - 15)

Number of Houses per Day per Team

Number of Working hours per day
per team

Number of Houses per hour
per team.

(5)

The number of houses per hour per team allows for assessment of the number and places of detailed stops per team and the target number of persons to be handled at each stop. The liaison medical officer is completing instructions and maps for each mobile team based on the above formula. Schedules for the school and creche team are based on the procedure adopted during the poliomyelitis campaign and are no problem.

## ANTIGENS.

- 1. D.W.T.: The diphtheria antigen will be Purified Toxoid Alum Precipitated (P.T.A.P.) combined as a triple antigen with pertussis and tetanus.
- 2. D.T.: The South African Institute for Medical Research has raw stocks of the separate antigens but requires a minimum period of 2 months to adsorb these preparations to alum phosphate for the combined prophylactic.
- 3. On verbal authority from Acting Medical Officer of Health (14.9.61) the undersigned verbally agreed with Dr. Mason that the South African Institute for Medical Research prepare the following maximal number of doses. (14.9.61).

## Each Administration Total Requirement

D.W.T. 30,000 doses D.T. 70,000 doses 90,000 doses 210,000 doses 300,000 doses

The individual dose throughout the campaigh of both the land D.T. preparations will be 0.5 c.ch. simplifying repeat that record keeping. Each team will have to establish and strictly maintain queues of those to receive D.W.T. and those to receive D.T. according to age.

#### EQUIPMENT.

- 1. Public Address Systems. 6 (5 in stock; 1 to be borrowed from N.E.A.D)
- 2. Large printed signs "Diphtheria" to be attached to mobile vans. 12

(to be produced by staff)

- 3. Spirits (NOT ETHER).
- 4. Syringes.
- 5. Needles.
- 6. Swabs, sterile covers and trays.

- 7. Water containers.
- 8. Boilers. 7 (Caution will be necessary in using open flame beneath boilers with danger of petrol vapour in vans. Delay in boiling caused by draughts affecting spirit flames is unsatisfactory and an approach will be made to producers of household gas regarding suitable pressure appliances.
- 9. Sweets: Children and mothers have become conditioned to sweets during the poliomyelitis campaigns. It would be valuable if the issue of a similar sweet could be given to each child old enough to suck such a sweet after injection. Surplus stocks over from the poliomyelitis campaign would be suitable subject to consent to retention of stocks by the Union Department of Health.
- 10. Small tables (from clinics)
- ll. Stools (each van will draw 2 wooden clinic stools from a clinic)
- 12. Record Books.
- 13. Referral Slips (Annexure A)
- 14. Area Block Maps.
- 15. Team Instructions.

The Medical Officer in charge of each mobile team will accompany the van in his own car.

## CONSENT.

- 1.c Owing to administration by injection and possibility of reaction to antigens recorded consent is essential.
- 2. Consent will be obtained at the beginning of the first phase to all 3 inoculations of the campaign from parents or guardians of children to be immunised at schools and creches. Consent forms (Annexure B) will be issued to School Principals and Creche Supervisors for distribution to parents for signature of consent and return before the scheduled first visit of the School and Creche Team.
- 3. Consent to immunisation will be entered in the record book of each mobile team conducting the house to house campaign. Failure to consent will likewise be entered.
- 4. Consent forms (Annexure B) will also be held at clinics for completion by parents or guardians of those cases referred to clinics by mobile teams who found parents or guardians or children away at the time of the scheduled wishes

#### PROPAGANDA.

- lo In contrast to the recent Policuschitis campaigns the element of well-founded fear can be used to advantage in stimulating response.
- Advertisements in the press were not used in the last three feeds of polio vaccine and are considered unnecessary expenditure in the case of the Bantu. Press and magazine (e.g. "Our Africa") editorials and articles cost nothing and are effective in stimulating reaction.
- 3. Propaganda channels will be the following:
  - (a) Schools and Creches
    - i) Letters to School Principals and Nursery School Supervisors (150/lst Administration only).
    - ii) Combined letters and Consent Forms to parents or guardians (40,000/lst Administration only).
  - (b) Householders
    - i) Letters to householders to be distributed by

Non-European Affairs Constables. (70,000 for each administration)

- ii) Contact at times of rent paying should not be made during proposed campaign owing to associative thinking in relation to rent collections and problems related thereto.
- iii) The 6 vans will patrol their individual areas for 2 days prior to the beginning of each phase and announce the campaign by means of their public address systems.
- (c) Information Officer: Non-European Affairs Department
  - i) Press and Magazines editorials, articles and progress statements.
  - ii) Bantu Radio and Rediffusion.
- (d) Clinics
  - i) Regular announcement at suitable intervals by designated clerk to waiting persons at each clinic outlining menace of diphtheria and details of campaign.
  - ii) Information to mothers attending ante-natal and child welfare clinics.
- (e) Word of mouth by those who know and who have had their children injected probably remains one of the most effective channels in many areas.

## RECORDS.

\*

- l. Records should not only form a statistical pool but also enable an individual to be related to his or her record e.g. consent form. Consent cards of the poliomyelitis campaigns could only be so related with great difficulty and very likely not at all. The problem is complex.
- 2. The aim is to establish a set of records listing every house in the South Western Native Areas, and the children in the susceptible age group living at each house.
- 3. The task is a mammoth one and was at first discarded as Utopian. However on consideration it is apparent that if achieved it will solve many other practical problems.
- 4. The following is therefore recommended with the understanding that theory can be carried no further and that it should be tested by practical application.
- 5. Houses in the Native Areas are not numbered in sequence which complicates all types of domiciliary work.

#### A. MOBILE TEAMS :-

(a) Hard covered foolscap sized exercise books will be used.

(b) Approximately 90 books will be required for covering the houses in the area. (4 house entries on each side of a page, 8 entries per page, 800 house entries per book, 90 books for the area, 15 books per mobile team).
(c) Books will be labelled and numbered in sequence for each

- (c) Books will be labelled and numbered in sequence for each mobile team according to sectional blocks of houses allocated. In this way each mobile team will only use one of its 15 record books at a time according to the area in which it is operating.
- (d) A sample page of a record book is attached (Annexure C)
- (c) The liaison medical officer is co-opting European wemen volunteer workers to draw up the necessary record books.

#### B. SCHOOL AND CRECHE TEAMS :-

(a) Letters with attached consent forms will only be distributed

before the first phase and will give details of all phases of the campaign. Consent will be requested for immunisation against diphtheria and tetanus and whooping cough in addition in the age group 3 months to 2 years. Likewise letters to school principals and creche supervisors will only be issued before the first phase and will explain details of all the phases of the campaign.
(b) Record books will be maintained by the Medical Officer,

School and Creche Team, which list the names and addresses of all pupils and inmates of each institution. School Principals and Creche Supervisors will be requested to assist in drawing these registers. A sample page

(Annexure D) is attached.

(c) On receipt of consent forms from parents and guardians, an entry indicating same will be made in the record books. Consent forms will be retained by the Department.

(d) Parents and guardians of those children for whom consent is not obtained will be specially approached.

(e) At the end of each phase of administration entries in the School and Creche Team Record Books will be transferred to the appropriate House Entry in the record books of the mobile teams.

## C. CLINICS :-

(a) Every parent or guardian presenting at clinics with referral slips from mobile teams (Annexure A) will be required to sign a consent form for each child at each injection. This is considered necessary for practical reasons. Inmates of schools and creches are reasonably fixed in situation as also are inmates of houses - it will be too difficult to trace consent for all administrations to the shifting attendances at clinics.

(b) The data from the consent forms will be transferred at the end of each period of administration (phase) to the appropriate house entries in the record books of the

mobile teams.

Thus it is hoped that at the end of the whole campaign the record books of the mobile teams will give a reasonably complete coverage of all the children in the susceptible age groups in the target area..

#### STATISTICS.

- Daily Summary Sheets (Annexure E) will be completed at the end of each day and forwarded to the Statistical Section.
- The numbers immunised each day, the total numbers immunised and the percentage of the target reached will be submitted daily to the Information Officer, Non-European Affairs Department, for distribution to Bantu press and radio and to the Medical Officer of Health for his information.

#### RESEARCH.

- The magnitude of the operation to be undertaken leaves no opening for specific research which might entail the taking of blood specimens and other additional calls on administration and very limited staff.
- Research will therefore be confined to assessing the effect of the campaign on the incidence of Diphtheria and Whooping Cough in the Native Areas.

## EXPENDITURE.

Assuming that the cost of antigens will be borne by the Union Department of Health the following is the estimated cost to this Department.

(a) Stationery (Annexure F)
(b) Equipment additional to normal stocks

(c) Miscellaneous e.g. photostat copies of related sectional maps of block areas with scheduled team progression drawn

R300.00 R100.00 in and to be pasted in each record book of mobile teams

Rloo.co

R500.00

I. W. F. SPENCER.
ASSISTANT MEDICAL OFFICER OF HEALTH.

25th September, 1961.

## CITY OF JOHANNESBURG - CITY HEALTH DEPARTMENT.

## DIPHTHERIA WHOOPING COUGH AND TETANUS IMMUNISATION.

AN ADULT MUST GO WITH THE CHILD.

DIPHTHERIA KILLS - GO AT ONCE.

## ANNEXURE B.

## AANHANGSEL B.

CITY OF JOHANNESBURG - CITY HEALTH DEPARTMENT.

STAD JOHANNESBURG - STADSGESONDHEIDSAFDELING.

NAME

NAAM SKOOL

ADDRESS

ADRES OUDERDOM

I HEREBY CONSENT TO THE ABOVE CHILD BEING IMMUNISED AGAINST DIPHTHERIA AND TETANUS, EK GEE HIERBY TOESTEMMING DAT BOGENOEMDE KIND TEEN WITSEERKEEL EN KLEM IN DIE KAAK

AND WHOOPING COUGH WHERE NECESSARY.

EN INDIEN DIT NODIG IS, TEEN KINKHOES GEIMMUNISEER WORD.

SIGNATURE OF PARENT OR GUARDIAN
HANDTEKENING VAN OUER OF VOCG.

	FIRS	T	SECO	)ND	THIR	D	BOOSTER		REACTION	
	D.W.T. 3/12-2		D.W.T. 3/12-2	D.T. 3-9	D.W.T. 3/12-2		D.W.T. 3/12-2	D.T. 3-9		
HOUSE NO. 9										
CONSENT: M.A.Radebe (Signature or Mark) NAMES: J., Paul	~		/		/		/			
2. James	/		1		1		1			
3. Mary		/		/		/				
4. Agnes		~		/						
5.										
HOUSE NO. 18										
CONSENT : No					-					
NAMES : 1.Elias										
2. Johannes		-								
3. Elain										
4.0				-						
5.	-									
HOUSE NO. 19		-		-						
CONSENT : A.Sithole				-		-				
NAMES : 1. Frank	-		~	-	/		1			
2. Olive		~		-/	-	1		5		
3.					-	-				
4.0				-						
5.	-									
HOUSE NO. 20		-				-		-		
CONSENT:				-				-		
NAMES: 1,	-	-				-				
2.							1			
3.		-	-		h	ouses .	- already	y draw.	s against n up in	
4.					b	ooks be	efore isa	sue to	teams -	
5.				1	C	ase o	f houses	9, 18	and 19)	

-

<b>J</b> '											
			FIRS	T	SECO	OND	THIR	D	BOOST	ER	REACTION
Litalid	ADDRESS	CONSENT	D.W.T. 3/12-2	D.T 3-9	D.W.T. 3/12-2	D.T 3-9	D.W.T. 3/12-2	D.T 3-9	D.W.T. 3/12-2	D.T 3-9	
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				-				-			
				-							

# CITY OF JOHANNESBURG - CITY HEALTH DEPARTMENT.

## D. W. T. CAMPAIGN.

## DAILY RETURNS.

	(a) D. W. T. 3/12 - 2 years	(b) D. T. 3 - 9 years
MOBILE TEAMS		
SCHOOLS AND CRECHES		
CLINICS		

DAILY	TOTAL	(a	+	b)

- The operation was conducted without any variation from the procedure laid down in the criginal memorandum from the undersigned dated 25th September,
- planning and method of entry of consent have proved entirely practical in field
- Apart from 1 minor urticarial response no cases of abnormal reaction to the injected antigens were reported.
- 7. The response and conduct of the populace was eremplary.
- I record my admiration and appreciation to all personnel of the teams and field control section and to all personnel left to maintain routine medical services under conditions of related staff shortage. I record my thanks to the Manager, Non-European Affairs Department for the invaluable assistance received from his Department.

I.W.F. SPENCER.

ASSISTANT MEDICAL OFFICER OF HEALTH.

15th December 1961.

Copies for Information Sent to the Following:-

MEDICAL SUPERINTENDENT, BARAGWANATH HOSPITAL. DIRECTOR, SERUM LABORATORIES, SOUTH AFRICAN DISTITUTE FOR MEDICAL RESEARCH.

40

X

MANACER, NON-EUROPEAN AFFAIRS DEPARTMENT.

LIAISON MEDICAL OFFICER.

SENIOR HEALTH VISITOR (NATIVE AREAS).

MEDICAL OFFICERS IN CHARGE OF TEAMS.

SUPERINTENDENT, DISINFECTING STATION.

CHIEF HEALTH INSPECTOR.

CHIEF CLERK.

SENIOR MEDICAL OFFICERS.

MEDICAL OFFICERS IN CHARGE OF CLINICS.

HEALTH VISITORS IN CHARGE OF CLINICS, MIDWIFERY UNITS

AND CHILD WELFARE SERVICES.

SENIOR HEALTH VISITOR (TUBERCULOSIS).

ASSISTANT MEDICAL OFFICER OF HEALTH (MEDICAL).
ASSISTANT MEDICAL OFFICER OF HEALTH (SANITATION).
CHIEF CHILD WELFARE MEDICAL OFFICER.
CHIEF TUBERCULOSIS MEDICAL OFFICER.
CHIEF HEALTH VISITOR.
ADMINISTRATIVE OFFICER.



## DEPUTY MEDICAL OFFICER OF HEALTH.

#### MEDICAL OFFICER OF HEALTH.

Sirs,

# SECOND PHASE: DIPHTHERIA, WHOOPING COUGH AND TETANUS IMMUNISATION CAMPAIGN: SMALLPOX VACCINATION: NATIVE AREAS.

- 1. The second phase of the Diphtheria, Whooping Cough and Tetanus Immunisation Campaign was completed between the scheduled dates 29th January 1962 to 16th February 1962.
- 2. A total of 85,475 childern (85% of estimated possible target) was inoculated in the selected age groups 3 months to 9 years.
  - (a) The two school and creche teams inoculated 24,813 children.
  - (b) The six mobile teams inoculated 55,979 children.
  - (c) A total of 4,683 children was inoculated at clinics as referred cases, being away from home when the mobile teams called at their houses.
  - (d) A total of 25,182 children received Diphtheria, Whooping Cough and Tetanus Antigens (age group 3 months to 2 years).
  - (e) A total of 60,293 children received Diphtheria and Tetanus Antigens. (Age group 3 years to 9 years.)
- 3. In addition 158,964 persons were vaccinated against smallpox during this phase.
- 4. The undertaking was uneventful.
- 5. The operation was conducted without any variation from the procedure laid down in the original memoranda from the undersigned dated 25th September 1961, (Diphtheria Whooping Cough and Tetanus) and 22nd January 1962 (Smallpox).
- 6. The schedules, book system of recording, area and domiciliary planning and method of entry of consent have again proved especially practical in field application. Children presenting for immunisation were easily related to their recorded entries of the first phase.
- 7. No instance of abnormal reaction to the antigens was reported. This is of significance in view of the combination of injection of Diphtheria, Whooping Cough and Tetanus antigens with Smallpox Vaccination in a large proportion of cases.
- 8. The co-operation, response and conduct of the populace was exemplary.
- 9. I record again my admiration and appreciation of the unflagging efficiency and calm team work of all personnel under conditions of not inconsiderable pressure. I record my thanks to the Manager, Non-European Affairs Department for the assistance received from his Department without which this operation could not be undertaken.



## COPIES FOR INFORMATION SENT TO THE FOLLOWING.

Medical Superintendent, Baragwaneth Hospital.

Director, Serum Laboratories, South African Institute for Medical Research.

Manager, Non-European Affairs Department.

Liaison Medical Officer.

Senior Health Visitor (Native Areas).

Medical Officers in Charge of Teams.

Superintendent, Disinfecting Station.

Chief Health Inspector.

Chief Clerk.

Senior Medical Officers.

Health Visitors in Charge of Clinics, Midwifery Units and Child Welfare Services.

Senior Health Visitor (Tuberculosis).

Assistant Medical Officer of Health (Medical).
Assistant Medical Officer of Health (Sanitation).
Chief Child Welfare Medical Officer.
Assistant Chief Child Welfare Medical Officer (Native Areas).
Chief Tuberculosis Medical Officer.
Chief Health Visitor.
Administrative Officer.

# DIPHTHERIA, WHOOPING COUGH AND TETANUS IMMUNIZATION COMBINED WITH SMALLPOX VACCINATION

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A consensus of opinion has indicated the inadvisability of combining primary smallpox vaccination with the administration of other antigens. Parish and Cannon¹ stated: 'When infants under 9 months old have to be vaccinated against both yellow fever and smallpox there should be an interval of 21 days between the vaccinations no matter which is done first. If possible, all other preventive inoculations for infants should be avoided within 3 weeks (a working compromise) of a primary vaccination, in order to reduce the likelihood of untoward effects that might be aggravated by, or ascribed to, the administration of several antigens at the same time. In older subjects, too, it is preferable that inoculations against typhoid, typhus, etc., should not be done at the same time as a primary vaccination'.

Routine immunization against diphtheria, whooping cough, tetanus, poliomyelitis and smallpox is conducted at the 8 polyclinics operated by the Johannesburg City Council in the Bantu residential areas of the city. Nevertheless, in the last decade 3,081 Bantu cases of diphtheria were notified, with 343 deaths, in the age group neonate - 10 years. Over the age of 10 years the incidence was insignificant.

#### THE IMMUNIZATION CAMPAIGN

As a result of the satisfactory response of the Bantu to the feed of Sabin type I oral poliomyelitis vaccine administered in 1960, and to the 3 feeds of trivalent Sabin vaccine in 1961 (84%, 81%, 90% and 86% of the estimated target being achieved in each feed), and the introduction of maintenance oral vaccination of the newborn, the probability of provocative poliomyelitis<sup>2,3</sup> arising from the injection of other antigens became minimal. Therefore, to meet the incidence of diphtheria an extensive campaign was organized to bring immunization to the 70,000 homes in the area. The estimated target was approximately 100,000 children in the age group 3 months - 9 years. The diphtheria antigen used was purified toxoid alum precipitated (PTAP) combined as a triple antigen with pertussis and tetanus antigens.

Children in the age group 3 months - 2 years received

the triple antigen and those in the age group 3 years -9 years received only diphtheria and tetanus antigens in view of a possible untoward reaction to pertussis vaccine in the older age group. Six mobile and 2 school and creche immunizing teams were placed in operation and the schedule provided for inoculations on 3 occasions, to be followed by a booster dose 1 year later. The first phase of the campaign was conducted between 27 November and 15 December 1961, the second between 29 January and 16 February 1962, and the third, scheduled for the period 2 April - 19 April 1962, is being carried out at the time of writing.

#### First Phase

In the first phase 80,657 children (81% of the estimated possible target) were inoculated in the selected age group of 3 months - 9 years, of whom 22,282 in the age group 3 months - 2 years received triple antigen and 58,375 in the age group 3 years - 9 years received diphtheria and tetanus antigens only. Apart from 1 urticarial response, no abnormal reactions to the injected antigens were reported.

#### Smallpox Outbreak

Ten days before the beginning of the second phase a case of smallpox was diagnosed in the area with extensive contact. A directive from the State Health Department required the initiation of large-scale smallpox vaccination in the Bantu residential complex. The smallpox vaccination and the scheduled second phase of the diphtheria, whooping-cough and tetanus immunization campaign were thus found to coincide, and the problem arose whether the second phase should be cancelled or should be carried out in combination with simultaneous smallpox vaccination, disregarding frequent opinion that the combined procedures were inadvisable. After consideration of the incidence of diphtheria, the fact that the first phase of the campaign was concluded, that the propaganda, organization and preparation for the second phase was complete, and the lack of evidence of unsatisfactory reaction to the combined procedures based on large numbers of instances, it was decided that diphtheria, whooping-cough and tetanus

TABLE I. IMMUNIZATION CAMPAIGN, SECOND PHASE

	Antigens			Smallpox	accinations		Estimate	d primary s	mallpox vace	cinations
	D.W.T. D.T. 3 months 3 years to to 2 years 9 years	Total	3 months to 2 years	3 years to 9 years	10 years and over	Tota	3 months to 2 years	3 years to 9 years	10 years and over	Total
Week before beginning of second phase 1st week	10,363 23,424 8,712 21,381 6,107 15,488	33,787 30,093 21,595	6,107	15,488	12,431	52,185 34,425 38,328 34,026	1,527	3,872	3,108	13,045 8,606 9,583 8,507
Total A. A. M.	25 182 60,293	85,475	H AN	DUO:	ING C	158,964	IW .A	HERL	HPHT	39,741

D.W.T. = diphtheria, whooping-cough and tetanus immunization; D.T. = diphtheria and tetanus immunization.

I. W. F. Steisteit, M.B., B.Ch., D.P.H., D.T.M. & H., Astritant Medical Officer of Health, Johannesburg, and immunization and smallpox vaccination would be carried out concurrently.

## Second Phase was age and in second and assisted adjust and

In this second phase 85,475 children (85% of the estimated possible target) were inoculated in the selected age group 3 months - 9 years, of whom 25,182 in the age group 3 months - 2 years were injected with triple antigen and 60,293 in the age group 3 years - 9 years received diphtheria and tetanus antigens. In addition 158,964 persons of all age groups were vaccinated against smallpox in the week preceding and during this period. 16 February 1962, and the third, scheduled for the period

#### 2 April - 19 April 1962 NOISSUSSID arried out at the time

Neither during the conduct of the first or second phases of the campaign, nor up to the time of writing, has a case of poliomyelitis been notified in the area. No instance was reported of abnormal reaction to the injection of the antigens and concurrent smallpox vaccination. However, it was in a proportion of cases only that an individual was inoculated with injected antigens and vaccinated against smallpox at the same time, and for a realistic assessment this and other factors required review.

Primarily, the organization conducting the diphtheria, whooping-cough and tetanus immunization had thrust upon it the additional task of concurrent mass vaccination, not only of the age group 3 months - 9 years, but also of all age groups. It was essential to bring rapid protection to the community and, in accordance with previous experience, incumbent to avoid slowing and confinement of the scope of the undertaking by collecting and recording of non-essential data in the field. Though a record for every individual was kept of diphtheria, whooping-cough and tetanus inoculations administered in each phase, it was not possible to record vaccination procedure in any form other than a total of vaccinations performed.

Sudden demand on lymph supplies and a panic reaction by sections of the population not resident in the Bantu areas, created a limited vaccine supply during the first 2 weeks of the combined operation. Vaccine, however, became freely available in the final third week of the phase. Accordingly, during the first 2 weeks doctors and nurses were directed to select subjects for vaccination on a broad basis of not having been vaccinated previously or the passing of a long interval since the last vaccination, both considered in relation to the lymph supply. In the final week there was no selective restriction. The discretion of the individual vaccinator therefore introduced an uncontrollable variable in statistical evaluation.

In view of these factors the problem was to determine a reasonably accurate and conservative figure of subjects where antigens and vaccination were administered together.

#### Estimated Primary Vaccination

Since no record was available of primary vaccinations, recourse was had to a survey conducted by one of us in 1960 in these areas, which showed that, of a random and geographically widespread total of 99,045 persons, 26,164 were previously unvaccinated, representing 26.42% of the sample drawn from the 500,000 residents. Recent reassessment of related factors indicates that no material change is likely to have occurred in this situation. Assuming that approximately 25% of all age groups in the Bantu residential areas of Johannesburg were unvaccinated, it is considered reasonable to estimate that 25% of the smallpox vaccinations in the immunization campaign under discussion were in fact primary vaccinations.

Though it is evident from Table I that several thousands of children received concurrent primary vaccination and injection of antigens in the first 2 weeks of the phase, it was only in the third week that free supply of lymph resulted in every child who received injected antigens being vaccinated at the same time, regardless of previous vaccinational history. Accordingly the undefined numbers of concurrent administrations in the first 2 weeks were excluded from the observation.

#### CONCLUSION

This study was therefore based on the data of the third week of the phase only, and it was estimated with reasonable accuracy that, with no reported or otherwise detected evidence of untoward reaction, 5,399 children received injected antigens with concurrent primary vaccination against smallpox. Of this total, 3,872 received diphtheria and tetanus and 1,527 diphtheria, tetanus and whoopingcough antigens.

#### was frequenced to bring IVARMMUS on by the 70,000 banner

A study is described of primary vaccination against smallpox and concurrent administration of other antigens without untoward reaction.

We thank Dr. J. W. Scott Millar, Medical Officer of Health, Johannesburg, for permission to publish this paper.

#### REFERENCES

- 1. Parish, H. J. and Cannon, D. A. (1961): Antisera, Vaccines and Tuber-culins in Prophylaxis and Treatment, p. 186. Edinburgh and London: E. and S. Livingstone.
  2. Phillips, W. P. (1959): Practitioner, 183, 263.
  3. Cole, W. (1959): Ibid., 183, 269.
  4. Cockburn, W. C. (1959): Ibid., 183, 265.

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DEPUTY MEDICAL OFFICER OF HEALTH.

MEDICAL OFFICER OF HEALTH.

Sire,

# THIRD PHASE: DIPHTHERIA, WHOOPING COUGH AND TETANUS IMMUNISATION CAMPAIGN: NATIVE AREAS.

- 1. The third and final phase of the Diphtheria, Whooping Cough and Tetanus basal Immunisation Campaign was completed between 2nd April 1962 and 19th April 1962.
- 2. A total of 74,945 children (75% of estimated possible target) was inoculated in the selected age group 3 months to 9 years.
  - a) The two school and creche teams inoculated 26,481 children.
  - b) The six mobile teams inoculated 47,162 children.
  - c) A total of 1,302 children was inoculated at clinics as referred cases being away from home when the mobile teams called at their houses.
  - d) A total of 19,760 children received Diphtheria, Whooping Cough and Tetanus antigens (age group 3 months to 2 years).
  - e) A total of 55,185 children received Diphtheria and Tetanus antigens (age group 3 years to 9 years).
- 3. The undertaking, as in the preceding phases was uneventful.
- 4. There was no variation from the procedure laid down in the original memorandum from the undersigned dated 25th September 1962.
- 5. The methods of recording, domiciliary planning and entry of consent remained unaltered and efficient.
- 6. No instance of abnormal reaction to the antigens was reported.
- 7. Apart, therefore, from an urticarial response in the first phase, no significant untoward reaction to the 241,079 injections and 158,964 vaccinations given in this campaign have been reported thus far.
- 8. The cooperation, response and conduct of the people remained exemplary. The total of 74,945 inoculations in the third phase is less than those of the first and second phases (80,659 and 85,475). In view of the virtual failure to obtain any satisfactory return for third inoculations in the past, the figure, in fact, is the most significant feature of the whole campaign.
- 9. I thank the doctors, nurses, municipal constables, clerks, drivers, clinic staffs, the Non-European Affairs Department and the people of the Native Areas for the task completed.

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19th April 1962.

COPIES FOR INFORMATION SENT TO THE FOLLOWING.
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Superintendent, Waterval Hospital.
Chief Child Welfare Medical officer.
Chief Tuberculosis Medical Officer.
Chief Health Visitor.
Administrative Officer.

## TRACHOMA : NATIVE AREAS.

- 1. Following upon the survey and viral studies undertaken which established the occurrence of trachoma in the Native Areas, a campaign will be conducted in accordance with this directive.
- 2. The compaign will be placed in operation on 1st June, 1962.
- 3. A barrier to continuation or advance of the disease will be placed at the level of all school children in the Native Areas.
- 4. The campaign will be conducted by a single medical officer who will be replaced after each month of operation by another. There will be an overlap of several days of dual operation by the retiring and incoming medical officer, to acquaint the latter with the circumstances of his task.
- 5. The first medical officer seconded for this duty will be Dr. M. Coster. In view of the data available to this official in terms of duties and experience with schools in recent immunisation campaigns, she will arrange and draw up the necessary systematic programme of work in accordance with previous directives applicable thereto.
- 6. The medical officer will be accompanied by one Non-European Staff Nurse who will remain on this duty until completion of the schedule for the current year.
- 7. The medical officer will submit a mileage return for the month of operation on the return forms presently in use, irrespective of whether the proposed locomotion allowance scheme is in operation or not.
- 8. Equipment will consist of a water container with water, soap, towel, basin, torch, loupe, medicaments and record books.
- 9. At each institution every pupil will be subject to examination by eversion of the tarsol lids.
- 10. Every case of chronic conjunctivitis, irrespective of aetiological pathology, will be listed and selected for therapy as a suspect case.
- ll. It will, of course, be impracticable to submit suspect cases to confirmatory viral studies. Further, suspect cases will include cases caused by organisms or conditions other than trachoma virus.
- 12. Suspect cases will be subject to treatment with albucid eye ointment. In rare instances skin sensitivity to sulphacetamide may become manifest. In these cases of contact dermatitis to albucid topical achromycin therapy will be substituted.
- 13. The regime of topical application will be b.d. for 5 consequtive days each month for 6 months.
- 14. The medical officer will arrange for applications subsequent to the first, which will be undertaken as a demonstration to teaching staff by the accompanying staff nurse, to be made N.V.C. calls at the various institutions by the nursing staff of the clinic serving the area.

- 15. Repetitive stages of treatment may be undertaken by teaching staff at each institution subject to assurance by nursing staff conducting N.V.C.s of their ability to do so and subject to the broad surveillance of such staff.
- 16. As the recent survey showed that contacts in the homes of suspect cases were four times as great as in groups without detectable eye pathology, the inmates of homes of cases detected in schools will be subject to the same treatment outlined above. The homes will, in the first instance, be visited by the team to acquaint the members of the domicile with the situation and thereafter become the responsibility of the domiciliary nursing staff of the clinic serving the area.
- 17. Two months after the completion of the six months of therapy of suspect cases at each institution, the doctor will revisit the institution and re-examine the cases who were on treatment. In this group a few resistant cases will be found.
- 18. Resistant cases in this category will be treated with a long acting sulpha drug. Madribon tabs daily will be given for 2 weeks whilst the monthly topical application of albucid for five consequtive days in each month will be continued for a further two months.
- 19. The schedule outlined will complete the attention required at any institution for that year. The next year only the new scholars entering an institution will be examined and suspect cases treated as outlined.
- 20. Any given institution should thus become and remain free of trachoma.
- 21. In view of the nonsusceptibility of the new born, the epidemiological measures introduced at the school-going age barrier will be sufficient.

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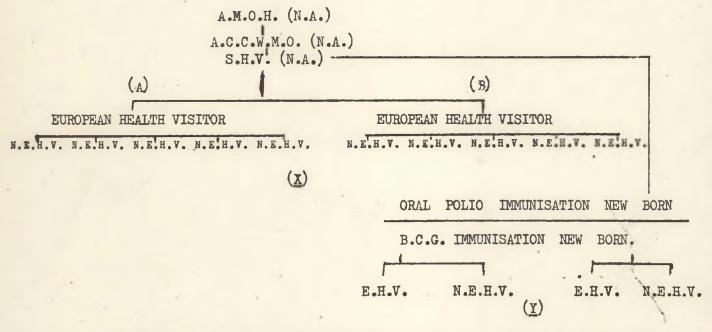
24th May, 1962.

## 8) DIRECTIVE.

#### PILOT HEALTH VISITOR SERVICE.

#### JABAVU AREA.

- 1. In terms of the recommendations of a previous report, Child Welfare Service:
  Native Areas, numbered R.1354, dated 12th August 1961, the modified recommendation of an even numbered report dated 31st August 1961 and the approvals thereto, a pilot health visitor service will be introduced in the area zoned to Jabavu Clinic and be based at this clinic.
- 2. The service will be placed in operation on 11th June 1962.
- 3. The staff complement of the unit will be 2 European and 10 Non-European Health Visitors.
- 4. Organisation and control will be the following:



- 5. Services performed by (Y) will gradually be incorporated in (X) in the Jabavu area. In due course, as the pilet health visitor service is expanded to cover the whole of the Bantu residential complex, oral poliomyelitis and B.C.G. immunisation of the new born will fall entirelywithin the responsibility of the health visitor service and the teams (Y) will be disbanded, first one and then the other, and personnel transferred to other duties.
- 6. The pilot health visitor unit will incorporate the child welfare services in the area. Full economic and technical use of health visitor potential will be made. Child welfare cannot be obtained in a domestic environment which precludes it. Primarily therefore the units activities will be directed to the domestic situation.

- 7. Child welfare will be deemed not to be infant welfare only but to cover the true confines of childhood from birth to adolescence.
- 8. In accordance with her background and training the health visitor will direct her attention to all aspects of the domestic situation, namely socio-economic factors, housing and environmental situations, marital relationships, pregnancy, the new born, the infant, the necessity for supplementary dried milk and other preparations for individual cases of infant necessity, the preschool child, the school child and its reactions and relationships to school activities and personnel, sibling and child parent relationships, the adolescent, the crippled child or invalid adult, problems of the mother and father, the aged, the family budget and spending, purchase economy and preparation of food, domestic hygiene and the organisation of household duties. She will forge liaisons, and refer where necessary, problems thereto, with ante natal clinics and maternity services, social workers, township superintendents, supervisors of pre-school institutions, inspectors of pre-school institutions, medical and dental services, hospitals and allied institutions, various organisations such as the African Feeding Scheme, African Self Help Association, Cripple Care (Orthopaedic health visitor), Mental Health, Institutions for the Blind, etc., South African Police and school principals and teachers.

The necessary introductions and establishment of liaisons between the 2 European Health Visitors in charge, and these various groups will be established by the A.M.O.H. (N.A.), A.C.C.W.M.O. (N.A.) and S.H.V. (N.A.). Once the contacts have been made they will be maintained by an example of efficient achievement, as frequently as possible by telephone when cases require discussion, rarely by personal interview when unusually rare gravity of a situation warrants it, and never on a basis of simple social contact between officials for hope of undefined benefit.

- 9. The 2 European Health Visitors of the unit (previously in charge of the oral poliomyelitis domiciliary immunisation teams for the new born) will continue to attend the weekly discussion groups held by A.M.O.H. (N.A.) at Moroka Clinic at which overall co-ordination and approach to problems and observations will be collated and evaluated as previously. The oral poliomyelitis domiciliary teams will likewise continue to attend the discussions to facilitate gradual incorporation of their functions in the health visitor unit and to submit their progress' reports and field observations for consideration.
- 10. Health Visitors will ensure that all necessary immunisations are completed in respect of children in the homes within their care. They will perform

B.C.G. immunisation by the percutaneous method within the first 10 days after the birth to the new born and commence the administration of 3 doses of oral polionyelitis vaccine to these infants, with an interval of 2 months between doses, commencing at the 3rd month of age. They will vaccinate against smallpox all these infants at 2 mouths of age (each health visitor will obtain a certificate of competence for vaccination from a clinic medical officer after completing the requisite number of vaccinations under supervision) and arrange for the commencement of D.V.T. immunisation at the 3rd month, 2nd and 3rd doses at menthly intervals thereafter and a booster dose at 2 years of age. When the first child welfare medical officer is appointed this official will conduct scheduled house to house tours to administer D.W. W. entigens to children listed by health visitors in charge of sectional areas. Until this medical officer is appointed children will have to be referred to the climic for D.W.T. immunisation by a medical officer. This temporary but uncapitatectory espect arises in terms of the requirement of the South Africa: Marsing Council forbidding injection by a nurse without acceptance of responsibility by a medical practitioner. A personal card of formunisations performed will be issued to each child.

- 11. The entablishment of organised controlled places of care and safety for the children of mothers absent during the day has received urgent attention. Health visitors will maintain close contact with the units within their areas especially in respect of medical examinations and immunisation of the children.
- 12. The European Realth Visitors in charge of areas have been enhantively grounded for 5 months in a basic understanding of the required principles of conduct and approach to the Bantu family and will ensure that these principles are conveyed to their staff and are capried out by them. They will above all ensure an avoidance of a dogmatic or overbearing attitude by health visitors, a retention of the satisfactory in Bantu custom and the present environment, modification only where it would be better, retention of the personal dignity of every member of every family by the manner and conduct of the health visitor, avoidance of blustering and authoritative intrusion into the privacy of the home. The health visitor will not thrust herself upon a family. Her success will be gauged by the ability to make a family want her and seek her out in times of trouble. She will not indicate views which might be at variance with those of an attending medical practitioner but will only offer cooperation to the doctor in these cases.

The health visitor though imparting knowledge will at all times remain a student of her subject in the field and will endeavour to retain the humility of learning.

If a health visitor pursues and attains these principles together with gaining of full confidence of families in her area, her hard won status will not easily be regained by a new health visitor taking over her duties after a short interval. As far as practicable staff complement will remain unchanged. Further, where possible, health visitors should be of the same cultural and language complex as the area they serve.

- 13. Easith Visitors will note and convey to the European Health Visitors in charge any point of especial interest which may arise during the course of their routine duties. The name of the health visitor and her observations will be submitted to the weekly discussion group for evaluation. They should not only pay attention to positive findings but also to regardly findings, e.g. they should not only observe faults in the homes they visit but should study the points of what they consider to be ideal domestic situations obtained under the especial circumstances of the townships.
- 14. The axea to be served by the health visitor Unit will be divided into 2 sections A and B. Section A will be allocated to team (A) and Section B to team (B). (See paragraph 4 above).
- 15. There are approximately 32,000 families in the total area:

  Section A (Team (A) ) will be allocated the following:

4,660 Families NALEDI 3,134 Families EMDENI TLADI 2,052 Families - 2,100 Families MOLETSANE MOLAPO 1,593 Families C.W. JABAVU -1,754 Families 480 Families MOROKA N. TOTAL FAMILIES 15,773

Section B (Team (B) ) will be allocated the following:

ZOLA 9,782 Families

WHITE CITY - 2,500 Families

JABULANI - 2,185 Families

ZONDI - 1,675 Families

TOTAL FAMILIES - 16,142

16. In / ....

16. In order to determine the load of families per health visitor per day the formula and system of grid progression evolved for the Diphtheria Whooping Cough and Tetanus Immunisation Campaign (see page 3 of directive for this campaign) and subsequently applied to other field problems (directive Oral Poliomyelitis Maintenance Immunisation R1412 page 2) is again applicable.

A phase will be constituted by an annual quarter. Each family where there is a new birth will be routinely visited 4 times a year by the health visitor of the area, i.e. once in each phase.

Each Non-European health Visitor will spend 4 days per week in the field and  $1\frac{1}{2}$  days in the clinic when she will attend the mothers and children she has referred from her allotted area. The  $\frac{1}{2}$  day at clinic will be Saturday mornings and be reserved in the main for working mothers.

On an average each Non-European health visitor at the rate of 4 field days per week will spend 18 days per month in the field, or 54 days per phase.

Application of the final formula is therefore as follows:

Average number of births in total area = 5.000

B = Average number of births per section = 2,500

C = Number of Health Visitors = 5

E = New Born per health visitor = 500

New Born per Health Visitor = 500 = New Births per phase

Number of Working Days per phase = 9 = 2

17. The average load per field day per health visitor of families where a new birth has been reported will be 2. Every such family in accordance with this schedule will therefore be routinely visited by a health visitor 4 times each year. Non-European health visitors will obtain details of new births through the European health visitor in charge of the section who will obtain the data from the extraction of birth notifications and registrations made by the oral poliomyelitis maintenance immunisation teams. In due course this extraction will be arranged by the European health visitors in charge of the sections. They will ensure that their health visitor units plot a systematic grid progression through their areas in accordance with these addresses and the additional visits each will require to make.

18. The / ....

- 18. The European health visitors in charge of sections will allocate the geographical areas to be assigned to each Non-European health visitor on a basis of equal division of the total number of families in each section i.e. she will allocate adjoining geographic areas on the basis of 16.000 i.e. 3,200 families per health visitor.
- 19. In addition to attending families where there have been new births, primarily at the time of B.C.G. inoculation within the first 10 days, and subsequently smallpox vaccinations at 2 months and oral poliomyelitis at 3 months, she will be responsible for such revisits as she may deem necessary and can manage, refer all problems of liaison and the like for the attention of the health visitor in charge of her section, and visit other families where it has been reported that her assistance is requested.
- 20. Duties of the European health visitors in charge of sections will include the following:
  - a) Overall charge of their allotted areas and staff.
  - b) Allocation of geographic areas to their health visitors.
  - c) Close surveillance of domiciliary work (in the field) and clinic sessions.
  - d) Testing and reporting on the attitudes and motivations of staff and on community reactions.
  - e) The drawing of one random sample each week of a report on a visit to a family by each health visitor on her staff, visiting the home in question with the health visitor, and assessing her activities by a control survey of the domestic situation.
  - f) The reporting of these 5 random assessments from her section to the weekly discussion group under A.M.O.H. (N.A.) for study and evaluation.
  - g) Observation and report on any special circumstances which would warrant a controlled study or research project.
  - h) Assisting her staff in their approach to families and with especial problems they encounter.
  - i) Referral to other organisations and persons of all cases requiring their especial assistance and attention.
  - j) Controlling of reports, record keeping and submission of statistics.
  - k) Maintaining observation for inevitably unforeseen situations which will arise during the course of this pilot project. In the light of experience the project will require modification before extension to other areas.

- 1) Submission to S.H.V.(N.A.), A.C.C.W.M.O.(N.A.) and A.M.O.H. (N.A.) at any time urgent problems of their difficult assignment.
- m) Submission of short quarterly reports on the circumstances of their sections.
- 21. Accommodation, equipment and like matters will be settled in the first few days of the project with the officials in 20 (1) above when field surveys of routes, allocations, and other matters will be carried out.
- 22. Transport for the European health visitors will be provided by the use of their private cars and locomotion allowances. The vehicle utilised for the transport of part-time medical officers and stationed at Jabavu clinic in the mornings will follow a set route and deposit the Non-European health visitors at specified points adjacent to their geographic areas. They will conduct their visits on foot. The radius of their areas is such that no difficulty should arise. The clinic station wagon will leave the clinic at 3.30 p.m. and cover the same route to pick up and return to the clinic the health visitors of the unit, who will meet the vehicle at the specified points above.
- 23. Records will be maintained by the domiciliary book system successfully applied to the recent Diphtheria Whooping Cough and Tetanus immunisation campaign.
- 24. Statistical returns will require finalisation following a short period of trial of the project. The collation of data will therefore commence at the beginning of the half-year 1st July 1962. As in previous campaigns pains will be taken to ensure that a plethora of paper work does not strangle the undertaking at its inception. Nevertheless sufficient data will have to be collated to indicate the success or failure of this new approach to a problem. Broadly it will have to include statistics of visits, revisits, and some classification of activities related thereto, e.g. child welfare, immunisations, referrals, cripples, invalids, etc., to define the extent of utilisation of all the skills and potentials of the health visitor.

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