#### PREFECTURE OF BENI DEPARTMENT GOVERNMENT OF THE REPUBLIC OF BOLIVIA

# STUDY ON ENHANCEMENT OF DISTRICT HEALTH SYSTEM FOR BENI PREFECTURE IN THE REPUBLIC OF BOLIVIA

# FINAL REPORT ANNEX 1



**FEBRUARY 2003** 

SSS

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**SUMMARY** 

MAIN REPORT (including APPENDIXES)

ANNEXES (Annex 1 and 2)

- Annex 1 Questionnaire for Monitoring on Pilot Study, Result of Education/ Training for 2 Hospitals in Trinidad, Result of Education/ Training for 2 CSs and Medical Boat, Own Evaluation Report on Pilot Study
- Annex 2 Result of Water Quality Survey, Detail Data of Facilities and Medical Equipment on Pilot Study, Equipment List and Building Plans for the Improvement Project of Health/ Medical Facilities based upon the Master Plan

"APPENDIXES" were prepared as "supporting documents", and "ANNEXES" were prepared as "Data Books".

Foreign exchange rate

US\$ 1.00 = Bs. 7.5 in January 2003 (Main Report 12. Project Cost and Evaluation)

US\$ 1.00 = 135 Japanese Yen in January 2002 (Main Report 11. Proposed Technical Cooperation)

#### ANNEX 1

# QUESTIONNAIRE FOR MONITORING ON PILOT STUDY, RESULT OF TRAINING/ EDUCATION FOR 2 HOSPITALS IN TRINIDAD, RESULT OF EDUCATION/ TRAINING FOR 2 CSs AND MEDICAL BOAT, OWN EVALUATION REPORT ON PILOT STUDY

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#### **ABBREVIATIONS**

English		Spanish			
ADD	Acute Diarrheal Diseases	EDA	Enfermedad Diarreica Aguda		
AIDS	Acquired Immunodeficiency Syndrome	SIDA	Síndrome de Inmuno Deficiencia Adquirida		
ARI	Acute Respiratory Infection	IRA	Infección Respiratoria Aguda		
BCG	Bacillus Calmette-Guerin (Vaccination)	BCG	Vaccuna BCG (Bacillus Calmette-Guerin)		
C/P	Counterpart	C/P	Contraparte		
CAPO	Attached Certificate of Services Offered	CAPO	Certificado Agregado de Prestaciones Otorgadas		
CARITAS	Catholic Agency for Overseas Aid and Development	CARITAS	Agencia Catolica para la Ayuda y el Desarrollo		
CDC	Center for Disease Control and Prevention (U.S.A.)	CDC	Centro para el Control y Prevención de las Enfermedades (EE.UU.)		
CDD	Control of Diarrheal Diseases	CDD	Control de las Enfermedades diarreicas		
CEASS	Center for Medical Supplies	CEASS	Centro de Abastecimientos y Suministros en Saluc		
CENETROP	National Center for Tropical Diseases	CENETROP	Centro Nacional de Enfermdades Tropicales		
CIDA	Canadian International Development Agency	CIDA	Agencia Internacional Canadiense para el Desarrollo		
CIES	Center for Research, Education and Services	CIES	Centro de Investigación, Edcuación y Servicios		
CIPS	Center for Health Inputs	CIPS	Centro de Insumos para la Salud		
CNS	National Health Insurance	CNS	Caja Nacional de Salud		
CPR	Contraceptive Prevalence Rate	TPA	Tasa de Prevalencia Anticonceptiva		
CRS	Catholic Relief Services (NGO)	CRS	Catholic Relief Services (ONG)		
CS	Health Center	CS	Centro de Salud		
DF/R	Draft Final Report	DF/R	Borrador del Informe Final		
DHS	Demographic and Health Survey	ENDSA	Encuesta Nacional de Demografíaa y Salud		
DILOS	Local Health Board	DILOS	Directorio Local de Salud		
DPT	Diphtheria, Whooping cough and Tetanuas	DPT	Vacuna DPT (Dipteria, Tosferina y Tétanos)		
DUF	Directorate of Funds	DUF	Directorio Unico de los Fondos		
EPARU	Rural Pastoral Team	EPARU	Equipo de Pastoral Rural		
EPI	Expanded Programme on Immunization	PAI	Programa Ampliado de Immunizaciones		
F/R	Final Report	F/R	Informe Final		
FIS	Social Investment Fund	FIS	Fondo de Inversion Social		
FPS	National Productive and Social Investment Fund	FPS	Fondo Nacional de Inversion Productiva y Social		
GDP	Gross Domestic Product	PIB	Product Interno Bruto		
HAM	Honorable Municipal Government	HAM	Honorable Alcaldia Municipal		
HIPC	Heavily Indebted Poor Country	PPME	País Pobre Muy Endeudado		

Human Immunodefficiency Virus  Inception Report  Intensive Care Unit  Inter-American Development Bank  Iodine Deficiency Disorders  Integrated Management of Childhood Illness  Infant Mortality Rate	VIH  IC/R  CUI  BID  DDY  AIEPI  TMI	Virus de Inmunodeficiencia Humana  Informe Inicial  Unidad de Cuidados Intensivos  Banco Interamericano de Desarrollo  Desordenes por deficiencia de yodo  Atención Integral de las Enfermedades Prevalentes de la Infancia
Intensive Care Unit  Inter-American Development Bank  Iodine Deficiency Disorders  Integrated Management of Childhood Illness  Infant Mortality Rate	CUI BID DDY AIEPI	Unidad de Cuidados Intensivos  Banco Interamericano de Desarrollo  Desordenes por deficiencia de yodo
Inter-American Development Bank  Iodine Deficiency Disorders  Integrated Management of Childhood Illness  Infant Mortality Rate	BID  DDY  AIEPI	Banco Interamericano de Desarrollo  Desordenes por deficiencia de yodo
Integrated Management of Childhood Illness Infant Mortality Rate	DDY	Desordenes por deficiencia de yodo
Integrated Management of Childhood Illness Infant Mortality Rate	AIEPI	
Infant Mortality Rate		Atención Integral de las Enfermedades
	TMI	Prevalentes de la Infancia
National Institute of Statistics		Tasa de Mortalidad Infantil
	INE	Instituto Nacional de Estadística
Interim Report	IT/R	Informe Intermedio
Intrauterine Contraceptive Device	DIU	Dispositivo Intrauterino
Japan Intrenational Cooperation Agency	JICA	Agencia de Cooperacion International del Japon
JICA Study Team	JST	Equipo de Estudio JICA
•		Conocinientos, Actitudes y Prácticas
-		
Low Birth Weight	BPN	Bajo Peso al Naver
Minutes of Meeting	M/M	Minuta de Reunión
Master Plan	P/M	Plan Maestro
Ministry of Health and Social Provision	MSPS	Ministerio de Salud y Previsión Social
Official Development Assistance	ADO	Asistencia Oficial para el Desarrollo
Operation and Maintenance	O/M (O&M)	Operacion y Mantenimiento
Oral Rehydration Salts	SRO	Sal de Rehidratacion Oral
Oral Rehydration Therapy	TRO	Terapia de Rehidratacion Oral
Basic Territorial Organization	OTB	Organizacion Territorial de Base
Pan-American Health Organization	OPS	Organización Panamericana de la Salud
Department Development Plan	PDD	Plan Departamental de Desarrollo Economico y Social
Municipal Development Plan	PDM	Plan de Desarrollo Municipal
Prefinal Report	PF/R	Informe Prefinal
Primary Health Care	APS	Atención Primaria de Salud
Annual Operation Plan	POA	Plan Operativo Anual
Progress Report	PR/R	Informe de Progreso
Integrated Health Project	PROSIN	Proyecto de Salud Integral
Poverty Reduction Strategy Papers	EPRP	Estrategias Para la Reducción de la Pobreza
		Puesto de Salud
I J I N N O O O O I I N I I	Intrauterine Contraceptive Device Iapan Intrenational Cooperation Agency IICA Study Team Knowledge, Attitude and Practice Low Birth Weight Minutes of Meeting Master Plan Ministry of Health and Social Provision Official Development Assistance Operation and Maintenance Oral Rehydration Salts Oral Rehydration Therapy Basic Territorial Organization Pan-American Health Organization Department Development Plan Municipal Development Plan Prefinal Report Primary Health Care Annual Operation Plan Progress Report Integrated Health Project	Intrauterine Contraceptive Device  JICA  J

	English	Spanish				
RHF	Recommended Home Fluid	SC	Suero Casero			
SBS	Basic Health Insurance	SBS	Seguro Básico de Salud			
SC	Steering Committee	CD	Comité de Dirección			
SEDES	Department Health Services	SEDES	Servicio Departamental de Salud			
SNIS	National Sub-system of Health Information	SNIS	Subsistema Nacional de Información Salud			
STD	Sexually Transmitted Diseases	ETS	Enfermedades Transmitidas Sexualmente			
SUMI	Universal Health Insurance for Mothers and Children	SUMI	Seguro Universal Materno Infantil			
ТВ	Tubeculosis	ТВ	Tubeculosis			
TBA	Traditional Birth Attendant	TBA	Partera			
TC	Technical Committee	СТ	Comité de Téchnico			
TDD	Trinidad	TDD	Trinidad			
TFR	Total Fertility Rate	TGF	Tasa Global de Fecundidad			
TT	Tetanus Toxoide	TT	Toxoide Tetánico			
UNDP	United Nations Development Programme	PNUD	Programa de las Naciones Unidas para Desarrollo			
UNICEF	United Nations Children's Fund	UNICEF	Fondo de las Naciones Unidas para la Infancia			
USAID	United States Agency for International Development	USAID	Argencia Internacional de los Estados Unidos para el Desarrollo			
WB	World Bank	BM	Banco Mundial			
WHO	World Health Organization	OMS	Organización Mundial de la Salud			
PPL	Popular Participation Law	LPP	Ley de Participacion Popular			
WRA	Women of Reproductive Age	MEF	Mujeres de Edad Fertil			
		<u> </u>				

Remarks 1: SUMI and DILOS

The Bolivian Government has newly introduced the expanded public insurance for maternal and infant health, SUMI (Seguro Universal Materno Infantil: Law No. 2426) that replaced the SBS at the end of 2002. To secure health service under SUMI, the government has also organized the Local Health Board named DILOS (Directorio Local de Salud) in each municipality for the health administration in place of District Health. According to the Law No. 2426, 10% of annual municipal budget and additional 10% from central government will be allocated to DILOS which consists of 3 members, i.e., City Mayor, SEDES representative and OTB (Surveillance Committee) representative. DILOS is responsible for the health administration including the operation/ maintenance of health/ medical facilities in each municipal jurisdiction

1	
1	QUESTIONNAIRE FOR MONITORING ON PILOT STUDY

Study on the
Enhancement of
District Health System
for Beni Prefecture

Date	English Translation
Interviewer	

#### 1.1 Urban Poverty Area Health Model

(1) Target health facility: Centro de salud in Nueva Trinidad, Cercado

#### General information

General information		
No. and name of covering communities		
Total population of covering area		persons
Dimension of covering area		Km <sup>2</sup>
Access to other health facilities	Name of facility/	
	Distance/	Km
No. of health workers	Male Dr./	Female Dr./
	Male Ns./	Female Ns./
	Male ANs./	Female ANs./
	Others/	

Expenditure (Bs.)

Category	Resources*	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
Personnel						
Pharmaceutical						
Administration						
Expenses for light/fuel/water						
Food						
Facility maintenance						
Medical equipment						
Medical consumables						
Others						
Total						

<sup>\*:</sup> choose answer from following categories; 1.MOH's direct subsidization, 2.Segro Basico de Salud,

#### Health services (number of performance)

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
General clinic service					
Emergency service					
Home visit					
Vaccination service					
Delivery service					
Maternal care					
Vector disease control					
Nutrition control					
Periodical health check					
Dental check					
STD prevention control					

#### Activity of health service

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
No. of patients					
No. of delivery					
No. of examination					
No. of dental care					
No. of emergency care					

#### Patient information

Age	Sex	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
less than 1	Male					
	Female					
1 to 5	Male					
	Female					
6 to 14	Male					
	Female					
15 to 45	Male					
	Female					
45 moreover	Male					
	Female					

#### Drug Inventory (Monthly)

Drug Inventory (Monthly)					(Date:	)
Classified note	Drug name	Type	Qnt'y	Receipt date	Valid date	Storage
Anesthesia						
Antipyretic						
Hypo-allergic						
Detoxication						
Infections						
Antibiotic						
Blood						
Cardiovascular system						
Dramaturgic						
Diagnostic use						
Antiseptic						
Diuresis						
Gastro-intestional						
system Endocrine system						
Vaccines						
Musculoskeletal						
Ophthalmologic						
Vaginal and vulval						
Respiratory system						
Metabolic buffer						
Vitamins						

#### Drug logistics and safekeeping (Monthly)

Category	Action	Factor of difficulties
Inventory control	Yes / No	
Excess stock	Yes / No	
Inventory adjustment	Yes / No	
Quality control	Yes / No	
Delivery record	Yes / No	
Responsible keeper	Yes / No	

(Date:

)

(Date:

)

#### Existing medical equipment list (Monthly)

Equipment name	Q'nty	Manufacturer's name	Acquisition*	Beginning year of use	Spending years	Current condition**
					•	

Acquisition\*: choose from Purchase, Donation, Private

Current condition \*\*: choose from Working, Repairing, Broken (out of order)

Study on the Enhancement of District Health System for Beni Prefecture

Date	English Translation
Interviewer	

#### 1.1 Urban Poverty Area Health Model

#### (2) Community Evaluation

#### Identification

1	Province	Cercado		
2	Community	Nueva Trinidad		
3	Interviewee	a) female b) male		
4	Household	a) with child under 2 years old		
		b) with child under 6 months old		
		c) within walking distance to the boat		
		d) requires transportation means (bus, motorcycle, boat,		
		carretón, other) to reach the boat		
		e) with monthly income over Bs. 100/ person		
		f) with monthly income under Bs. 30/ person		
5	Literacy	a) able to read and write		
		b) able to read but not write		
		c) able to write but not read		
		d) unable to read or write		

#### A. Access to Health Services

A1	Which health facility do you	a) CS/ PS	
	usually go to?	b) Medical boat	
A2	How do you find the	a) Not accessible b) Hardly accessible c)	
	accessibility of public health	Accessible d) Easily accessible	
	service facility?		
A3	Have you gained access to a	a) Yes b) No	
	public health facility since		
	the new CS was established?		
A-4	Are you able to receive the	a) Yes, all the time	
	service you seek at the CS?	b) Yes, most of the time	
		c) No, rarely	
		d) No, not at all	
A5	Do you find the doctor at the	a) Yes b) No	
	renovated CS sympathetic?		
A-6	Do you find the nurses at the	a) Yes b) No	
	renovated CS sympathetic?		

A7	What is the factor that you	a) Staff's attitude	
	find the staff sympathetic (or	b) Staff's time constraints	
	not sympathetic)?	c) Staff's gender	
		d) Staff's origin	
		e) Staff's ethnicity	
A8	Do you find the new CS	a) Yes, very much	
	reliable?	b) Yes, reasonably	
		c) No, barely	
		d) No, not at all	
A9	Do you find parteras	a) Yes, very much	
	reliable?	b) Yes, reasonably	
		c) No, barely	
		d) No, not at all	

#### B. General Health Conditions

B1 B2	Do you find your health conditions improved since the CS was renovated?  How many diarrhea cases did	a) Yes b) No a) 1-2 b) 3-5 c) more than 6	
<b>B</b> 2	you have in your family for the past week?	a) 1-2 b) 3-3 c) more than 0	
B3	Who do you or would you consult for prenatal care?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others	
B4	Who do you or would you consult for child delivery?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others	
B5	Has your choice of services for pregnancy care changed since the introduction of the new CS?	a) Yes, it has expanded (more variety) b) Yes, it has narrowed (less choices) c) No, it has not changed	

#### C. Microcredit

C1	How do you usually purchase	a) Pay in cash	
	drugs?	b) Pay in products	
		c) Pay on credit	
		d) Communal purchase	
C2	What is the means of	a) Contract labor	
	acquiring cash?	b) Remittance	
		c) Sales of products	
		d) Own business	
		e) Other	
C3	Do you help each other with	a) Yes, regularly	
	the neighbors?	b) Yes, on special occasions	
		c) Yes, but very rarely	
		d) Never (go to C5)	
C4	What are the occasions of	a) Ceremonies (e.g., wedding, funeral)	
	mutual help?	b) Before harvest	
		c) Before remittance	
		d) Emergencies (e.g., sickness)	
		e) Permanent credit union	
C5	Do you think saving cash	a) Yes	•
	regularly with neighbors will	b) No	
	help pay for medicines?	c) Not sure	

Study on the
Enhancement of
District Health System
for Beni Prefecture

Date	English Translation
Interviewer	

#### 1.2 Rural Poverty Area Health Model

(1) Target health facility: Centro de salud in Santisíma Trinidad, Moxos

#### General information

• · · · · · · · · · · · · · · · · · · ·			
No. and name of covering communities			
Total population of covering area		p	ersons
Dimension of covering area			Km <sup>2</sup>
Access to other health facilities	Name of facility/		
	Distance/		Km
No. of health workers	Male Dr./	Female Dr./	
	Male Ns./	Female Ns./	
	Male ANs./	Female ANs./	
	Others/		

Expenditure (Bs.)

Category	Resources*	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
Personnel						
Pharmaceutical						
Administration						
Expenses for light/fuel/water						
Food						
Facility maintenance						
Medical equipment						
Medical consumables						
Others						
Total						

<sup>\*:</sup> choose answer from following categories; 1.MOH's direct subsidization, 2.Segro Basico de Salud,

<sup>3.</sup> Patient Fee, 4. Insurance Benefit, 5. Donation Found, 6. Others

#### Health services (number of performance)

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
General clinic service					
Emergency service					
Home visit					
Vaccination service					
Delivery service					
Maternal care					
Vector disease control					
Nutrition control					
Periodical health check					
Dental check					
STD prevention control					

#### Activity of health service

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
No. of patients					
No. of delivery					
No. of examination					
No. of dental care					
No. of emergency care					

#### Patient information

Age	Sex	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
less than 1	Male					
	Female					
1 to 5	Male					
	Female					
6 to 14	Male					
	Female					
15 to 45	Male					
	Female					
45 moreover	Male					
	Female					

(Date:

(Date:

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#### Drug Inventory (Monthly)

Zing in thirty (intollerity)		1	1		`	
Classified note	Drug name	Type	Qnt'y	Receipt date	Valid date	Storage
Anesthesia						
Antipyretic						
Hypo-allergic						
Detoxication						
Infections						
Antibiotic						
Blood						
Cardiovascular system						
Dramaturgic						
Diagnostic use						
Antiseptic						
Diuresis						
Gastro-intestional						
system						
Endocrine system						
Vaccines						
Musculoskeletal						
Ophthalmologic						
Vaginal and vulval						
Respiratory system						
Metabolic buffer						
Vitamins						

#### Drug logistics and safekeeping (Monthly)

Category	Action	Factor of difficulties
Inventory control	Yes / No	
Excess stock	Yes / No	
Inventory adjustment	Yes / No	
Quality control	Yes / No	
Delivery record	Yes / No	
Responsible keeper	Yes / No	

(Date:

)

#### Existing medical equipment list (Monthly)

Equipment name	Q'nty	Manufacturer's name	Acquisition*	Beginning year of use	Spending years	Current condition**
		панс		year or use	years	Condition

Acquisition\*: choose from Purchase, Donation, Private

Current condition \*\*: choose from Working, Repairing, Broken (out of order)

Study on the Enhancement of District Health System for Beni Prefecture

Date	English Translation
Interviewer	

#### 1.2 Rural Poverty Area Health Model

#### (2) Community Evaluation

#### Identification

1	Province	Moxos
2	Community	Santísima Trinidad
3	Interviewee	a) female b) male
4	Household	a) with child under 2 years old
		b) with child under 6 months old
		c) within walking distance to the boat
		d) requires transportation means (bus, motorcycle, boat,
		carretón, other) to reach the boat
		e) with monthly income over Bs. 100/ person
		f) with monthly income under Bs. 30/ person
5	Literacy	a) able to read and write
		b) able to read but not write
		c) able to write but not read
		d) unable to read or write

#### A. Access to Health Services

A1	Which health facility do you usually go to?	a) CS/ PS b) Medical boat	
A2	How do you find the accessibility of public health service facility?	a) Not accessible b) Hardly accessible c) Accessible d) Easily accessible	
A3	Have you gained access to a public health facility since the new CS was established?	a) Yes b) No	
A-4	Are you able to receive the	a) Yes, all the time	
	service you seek at the CS?	b) Yes, most of the time c) No, rarely	
		d) No, not at all	
A5	Do you find the doctor at the renovated CS sympathetic?	a) Yes b) No	
A-6	Do you find the nurses at the renovated CS sympathetic?	a) Yes b) No	

A7	What is the factor that you	a) Staff's attitude	
	find the staff sympathetic (or	b) Staff's time constraints	
	not sympathetic)?	c) Staff's gender	
		d) Staff's origin	
		e) Staff's ethnicity	
A8	Do you find the new CS	a) Yes, very much	
	reliable?	b) Yes, reasonably	
		c) No, barely	
		d) No, not at all	
A9	Do you find parteras	a) Yes, very much	
	reliable?	b) Yes, reasonably	
		c) No, barely	
		d) No, not at all	

#### B. General Health Conditions

B1 B2	Do you find your health conditions improved since the CS was renovated?	a) Yes b) No a) 1-2 b) 3-5 c) more than 6	
D2	How many diarrhea cases did you have in your family for the past week?	a) 1-2 b) 3-3 c) more than 0	
B3	Who do you or would you consult for prenatal care?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others	
B4	Who do you or would you consult for child delivery?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others	
B5	Has your choice of services for pregnancy care changed since the introduction of the new CS?	<ul><li>a) Yes, it has expanded (more variety)</li><li>b) Yes, it has narrowed (less choices)</li><li>c) No, it has not changed</li></ul>	

#### C. Microcredit

C1	How do you usually purchase	a) Pay in cash	
	drugs?	b) Pay in products	
		c) Pay on credit	
		d) Communal purchase	
C2	What is the means of	a) Contract labor	
	acquiring cash?	b) Remittance	
		c) Sales of products	
		d) Own business	
		e) Other	
C3	Do you help each other with	a) Yes, regularly	
	the neighbors?	b) Yes, on special occasions	
		c) Yes, but very rarely	
		d) Never (go to C5)	
C4	What are the occasions of	a) Ceremonies (e.g., wedding, funeral)	
	mutual help?	b) Before harvest	
		c) Before remittance	
		d) Emergencies (e.g., sickness)	
		e) Permanent credit union	
C5	Do you think saving cash	a) Yes	
	regularly with neighbors will	b) No	
	help pay for medicines?	c) Not sure	

Study on the	Date	English
Enhancement of		Translation
District Health System	Interviewer	
for Beni Prefecture		

# 1.3 Integrated and Comprehensive Development Model through the introduction of medical boat system

(1) Target health facility: Medical Boat among Cercado and Momore Districts through Mamoré River

#### General information

Name of covering communities and each population		
Total population of covering area		persons
Dimension of covering area		Km <sup>2</sup>
No. of health workers	Male Dr./	Female Dr./
	Male Ns./	Female Ns./
	Male ANs./	Female ANs./
	Others/	

Expenditure (Bs.)

Category	Resources*	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
Personnel						
Pharmaceutical						
Administration						
Expenses for light/fuel/water						
Food						
Facility maintenance						
Medical equipment						
Medical consumables						
Others						
Total						

<sup>\*:</sup> choose answer from following categories; 1.MOH's direct subsidization, 2.Segro Basico de Salud,

<sup>3.</sup> Patient Fee, 4. Insurance Benefit, 5. Donation Found, 6. Others

#### Health services (number of performance)

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
General clinic service					
Emergency service					
Home visit					
Vaccination service					
Delivery service					
Maternal care					
Vector disease control					
Nutrition control					
Periodical health check					
Dental check					
STD prevention control					

#### Activity of health service

	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
No. of patients					
No. of delivery					
No. of examination					
No. of dental care					
No. of emergency care					

#### Patient information

Age	Sex	2002 Jun	2002 Jul	2002 Aug	2002 Sept	2002 Oct
less than 1	Male					
	Female					
1 to 5	Male					
	Female					
6 to 14	Male					
	Female					
15 to 45	Male					
	Female					
45 moreover	Male					
	Female					

(Date:

(Date:

)

)

#### Drug Inventory (Monthly)

Classified note	Drug name	Type	Qnt'y	Receipt date	Valid date	Storage
Anesthesia				date	date	
Antipyretic						
Hypo-allergic						
Detoxication						
Infections						
Antibiotic						
Blood						
Cardiovascular system						
Dramaturgic						
Diagnostic use						
Antiseptic						
Diuresis						
Gastro-intestional system						
Endocrine system						
Vaccines						
Musculoskeletal						
Ophthalmologic						
Vaginal and vulval						
Respiratory system						
Metabolic buffer						
Vitamins						

#### Drug logistics and safekeeping (Monthly)

Category	Action	Factor of difficulties
Inventory control	Yes / No	
Excess stock	Yes / No	
Inventory adjustment	Yes / No	
Quality control	Yes / No	
Delivery record	Yes / No	
Responsible keeper	Yes / No	

(Date:

)

#### Existing medical equipment list (Monthly)

Equipment name	Q'nty	Manufacturer's name	Acquisition*	Beginning year of use	Spending years	Current condition**

Acquisition\*: choose from Purchase, Donation, Private

Current condition \*\*: choose from Working, Repairing, Broken (out of order)

Study on the Enhancement of District Health System for Beni Prefecture

Date	English Translation
Interviewer	

#### 1.3 Integrated and Comprehensive Development Model

#### (2) Community Evaluation

#### Identification

1	Province	a) Cercado b) Mamoré			
2	Community				
3	Interviewee	a) female b) male			
4	Household	a) with child under 2 years old			
		b) with child under 6 months old			
		c) within walking distance to the boat			
		d) requires transportation means (bus, motorcycle, boat,			
		carretón, other) to reach the boat			
		e) with monthly income over Bs. 100/ person			
		f) with monthly income under Bs. 30/ person			
5	Literacy	a) able to read and write			
		b) able to read but not write			
		c) able to write but not read			
		d) unable to read or write			

#### A. Access to Health Services

A1	Which health facility do you usually go to?	a) CS/ PS b) Medical boat	
A2	How do you find the accessibility of public health service facility?	a) Not accessible b) Hardly accessible c) Accessible d) Easily accessible	
A3	Have you gained access to a public health facility since the new CS was established?	a) Yes b) No	
A-4	Are you able to receive the service you seek at the CS?	a) Yes, all the time b) Yes, most of the time c) No, rarely d) No, not at all	
A5	Do you find the doctor at the renovated CS sympathetic?	a) Yes b) No	
A-6	Do you find the nurses at the renovated CS sympathetic?	a) Yes b) No	

A7	What is the factor that you	a) Staff's attitude
	find the staff sympathetic (or	b) Staff's time constraints
	not sympathetic)?	c) Staff's gender
		d) Staff's origin
		e) Staff's ethnicity
A8	Do you find the new CS	a) Yes, very much
	reliable?	b) Yes, reasonably
		c) No, barely
		d) No, not at all
A9	Do you find parteras	a) Yes, very much
	reliable?	b) Yes, reasonably
		c) No, barely
		d) No, not at all

#### B. General Health Conditions

B1	Do you find your health conditions improved since the CS was renovated?	a) Yes b) No
B2	How many diarrhea cases did you have in your family for the past week?	a) 1-2 b) 3-5 c) more than 6
В3	How many cold/ ARI cases did you have in your family for the past week?	a) 1-2 b) 3-5 c) more than 6
B4	Who do you or would you consult for prenatal care?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others
В5	Who do you or would you consult for child delivery?	a) Partera b) CS staff c) family member (non-parteras) d) Curandero e) Partera and CS staff f) Others
В6	Has your choice of services for pregnancy care changed since the introduction of the new CS?	a) Yes, it has expanded (more variety) b) Yes, it has narrowed (less choices) c) No, it has not changed

#### C. Microcredit

	•	
C1	How do you usually purchase	a) Pay in cash
	drugs?	b) Pay in products
		c) Pay on credit
		d) Communal purchase
C2	What is the means of	a) Contract labor
	acquiring cash?	b) Remittance
		c) Sales of products
		d) Own business
		e) Other
C3	Do you help each other with	a) Yes, regularly
	the neighbors?	b) Yes, on special occasions
		c) Yes, but very rarely
		d) Never (go to C5)
C4	What are the occasions of	a) Ceremonies (e.g., wedding, funeral)
	mutual help?	b) Before harvest
		c) Before remittance
		d) Emergencies (e.g., sickness)
		e) Permanent credit union
C5	Do you think saving cash	a) Yes
	regularly with neighbors will	b) No
	help pay for medicines?	c) Not sure

2 RESULT OF EDUCATION/TRAINING
FOR 2 HOSPITALS IN TRINIDAD

#### JAPAN INTERNATIONAL COOPERATION AGENCY

#### PREFECTURE OF BENI DEPARTMENT GOVERNMENT OF THE REPUBLIC OF BOLIVIA

# STUDY ON ENHANCEMENT OF DISTRICT HEALTH SYSTEM FOR BENI PREFECTURE

#### INITIAL REPORT DIAGNOSIS OF HOSPITALS

#### HOSPITAL PRESIDENTE GERMAN BUSCH HOSPITAL MATERNO INFANTIL Dr. JESUS VARGAS

**JULY 2002** 

#### **INITIAL REPORT**

According to the terms of the agreement dated May 31, 2002, for the improvement of the management of two hospitals in the city of Trinidad, Hospital Presidente Germán Busch and Hospital Materno Infantil Dr. Jesús Vargas, (Mother and Child Care Hospital) through a technical and practical training program for the hospitals personnel covering the areas of (1) Hospital Management, (2) Medical Equipment Operation and Maintenance and (3) Medicines and consumables (inputs), the consultant team visited the city of Trinidad from June 17 to 22, in order to identify the management and operation problems, to hold interviews with the hospitals' personnel and to develop questionnaires for the evaluation of general conditions at the hospitals.

The consultant team is made up of the following professionals:

Dr. Carlos Dabdoub Arrien: Neuro Surgeon Physician DIRECTOR OF THE STUDY

Dr. Eidy Roca: Public Health Physician, Ph. D. HOSPITAL MANAGEMENT SPECIALIST

Dr. Beatriz Sulzer: Biochemist - Pharmacist
MEDICINE AND CONSUMABLES MANAGEMENT SPECIALIST

Ing. Juan Carlos Vélez: Biomedical Engineer
MEDICAL EQUIPMENT MAINTENANCE SPECIALIST

Lic. Hugo Ribera Mansilla: Economist HOSPITAL ADMINISTRATION SPECIALIST

Upon the base of the visit to Trinidad, the consultant team established the following diagnosis of the current situation:

#### PRESIDENTE GERMAN BUSCH HOSPITAL

- 60 bed, general hospital

- Occupation rate: 45 %

- Hospital's check - outs: 1,632/year

- Discharged patients: 85 %

Hospital's Mortality Rate: 2.3 %Average of Consults / day: 20

- Average of consults / hour: 3.3

Surgeries / year (adults and children): 520

Surgeries/ day: 2

Laboratory analysis: 17 / day

- Patients for Radiology (X -Rays): 1,151/ year

- N° of X -Ray plates: 1,526/ year

Average of plates / day / patient: 4

N° of full time Physicians: 6N° of half time Physicians: 22

The components that were studied in the three subject areas of this study are described as follows:

#### 1. HOSPITAL MANAGEMENT

#### 1.1 Hospital Planning and Organization

- The Hospital does not prepare a Yearly Operative Plan (POA for the initials of Plan Operativo Annual, in Spanish). Activities are performed according to the needs of the moment. The organization chart is outdated, the hospital is not divided in departments, and its organization only covers two areas, health care and supporting services. (A model of the organization chart is shown as an annex).
- The Hospital has a Technical Administrative Council, with the participation of the Director, Administrator and service heads.
- The hospital has external consult services only in the morning, no consultation exist for surgery. It has some specialized consultations such as urology, for example, which is carried out once a week.
- Hospitalization services are for medicine and surgery.

#### 1.2 Organization of services

#### 1.2.1 Manuals of functions, procedures and medical care flow diagram

Non existent. A Functions Manual from SEDES is being disseminated for internal review.

#### 1.2.2 Medical Care Protocols

Non existent in writing, conventional norms are applied.

#### 1.2.3 Clinical Chart Management

No follow- up of the clinical history filling— in is done; there are no rules for its use and derivation to statistics and file.

#### 1.2.4 Statistics

SNIS is applied; however it is a manual procedure. There are no basic processing means available to process information, such as calculators, or typewriters, not to mention computers for the input of data from SNIS to the national information system.

#### 1.2.5 Committees

An Intra- Hospital Infections Committee exists, but does not work.

## 1.2.6 Humanization of medical care: Treatment of patients, welcome, information.

No work has been done in this component. A vision of global care of the patient is non existent. No awareness of the hospital's personnel about these matters.

## 1.2.7 Control systems of the compliance of hospital's activities: Supervision

Eventual visits come from SEDES, no programmed supervision exists. There is no internal supervision of services application.

#### 1.2.8 Monitoring

No periodic meetings are held by the Information Analysis Committee), nor a committee to analyze the medical care indexes of the different services provided by the hospital.

#### 1.2.9 Evaluation

No evaluations are developed nor a follow – up of the activities carried out.

#### 1.3 Coordination with the service network: Role of the hospital

The hospital has no functions defined within the services network. This is the reference hospital for the urban District of the city of Trinidad. It also takes care of patients referred from the Department's provinces. No formal relationships have been established with the District's Health Centers.

Given the characteristics of the human resources of the hospital and the tendencies of the existing equipment and equipment to be installed (tomography scanner) it Works as a third level hospital, however it performs activities that correspond to the 1<sup>st</sup> and 2<sup>nd</sup> level of medical care.

#### 1.4 Administrative and financial control mechanisms:

#### 1.4.1 Budget

An income and expenses budget is prepared, however it is not submitted to the Municipality's approval. The transfers of funds from the General Treasury of the Nation (TGN) are not incorporated to the budget, but are used for the payment of the payroll. Moreover, no balances from previous year are carried on, nor accounts payable and accounts receivable. No control is done on the execution of the budget. Expenditures are made upon request, according to need and availability. No Cash — Flow is prepared.

A budget execution statement has been prepared, dated June 30, 2002, along with a comparison of income and expenses (see annex).

#### 1.4.2 Annual Balance and Statement of Results

These are not prepared.

#### 1.4.3 Service Fees

The current service fees list is presented in an annex. The prices have not been adjusted since several years ago.

#### 1.4.4 Personnel control

There is no personnel control system installed. Work hours schedule is not written for the external consultation work of the physicians, hospitalization and other tasks such as teaching and scientific activities. A high index of officer incompatibility exists, even though it has been authorized by the Physicians Association, due to the lack of specialty physicians. This situation makes the physician's schedule control a very difficult task.

#### 1.5 Definition of fees. Charging system:

The fees are not derived from a cost analysis of the different services, hence prices have a political character, are calculated in Bolivianos, and consequently do not follow the monetary variations.

#### 1.5.1 Social Services Categorization

Uniform parameters and/or criteria for social categorization are not applied. Nor all the cases of indigent patients are recorded. The social and economic categorization of patients who go through Social Work are not recorded in the accounting system. The indigence index is very low because of the underrecording of information that occurs, and does not reflect reality. In the case of patients referred from rural districts, the vast majority of cases have no monetary resources to cover for the medical care they receive.

#### 1.5.2 Income sources

The General Treasury of the Nation finances Bs. 2,725,242.00 to pay the salaries of physicians, paramedics and administrative personnel. The hospital spends Bs. 83,000.00 per annum in temporary personnel, an equivalent of 19.45% of its income.

The income for the sale of services reaches the amount of Bs. 426,611.—amount used to cover the operation costs of the hospital.

#### 1.5.3 Boarding services

The service exists but it has no regulations.

#### 1.5.4 Physical Infrastructure

The infrastructure is obsolete and inadequate. Buildings are deteriorated. No maintenance is made to the main building and its sectors, due to the lack of economic resources availability.

#### 2. MANAGEMENT OF MEDICINES AND CONSUMABLE

The hospital has its own institutional pharmacy to provide medicines, the majority of these are used under the commercial name and not the generic name as it should be with this kind of products. Moreover, the existence of medicines that do not correspond to an institutional pharmacy was observed; (popular consumption products that may be freely sold, because a physician's prescription is not required)

#### 2.1 Medicine supply

Supplies are acquired according to requirements and money availability. No programs are prepared using the need and historical consumption. No procedures manuals exist in this regard.

The pharmaceutical products were acquired with funds that had been assigned o October 10, 1996, coming from PSF, a project that depends from the Ministry of Health. The amount was for Bs. 37,875.—and was used through the rotary fund modality through District I. The proceedings generated by the sale of medicines are put in deposit in an account on the Paititi Cooperative an not in the hospital's general account. The economic movement generated by the pharmacy is not recorded using accounting methods.

Currently, the pharmacy has a balance of Bs. 16,455.60 plus a cash balance of Bs. 2,002.60. An inventory count made and valuated at purchase costs, established a medicine stock of Bs. 27,500.--, bringing the total of patrimony to Bs. 45,958.20.

#### 2.1.1 Infrastructure and location

It is located near the entrance of the hospital, so it is considered as an excellent location because it offers a readily attention to patients. The physical space is too small and does not allow for the adequate conservation, disposition and exhibition of medicines. The shelves are small for the quality of product in

stock. The pharmacy owns a refrigerator for the products that need refrigeration.

#### 2.1.2 Administration

A lady who is a Licensed Nurse, Works as Administrator of the hospital, however she also works as a nurse in the hospital, with a salary in the payroll, moreover she charges a salary from the pharmacy, from funds of the rotary fund. There are no auxiliary personnel to replace her in cases of justified absences.

The person in charge of the pharmacy purchases the medicines, she pays for the products drawing funds from the cooperative account, with an authorization from the Hospital's Director. The sales are made through the person in charge of the pharmacy and the proceedings are taken by her to deposit in the Paititi Cooperative account and not in the general account of the hospital.

The purchased medicines are taken directly to the pharmacy, without going through the general warehouse of the hospital.

The pharmacy does not contribute with free medicines for indigent patients; these have to be obtained by the Social Issues Worker, Voluntary Women Organizations and in some occasions by URES, organization that provides medicines that are close to their expiration date.

The team observed very slight or null supervision and control by the Administration and Direction of the hospital.

#### 2.1.3 Medicine recording

A card register exist, but it has not been updated since two months ago, making it impossible to control the inventory. The medicine sales are recorded in a notebook, from where the data is copied to the cards.

#### 2.1.4 Dispensation of medicines

There is no coordination between the person in charge of the pharmacy and the medical sector. The physicians do not know what types of medicines are available in the pharmacy; hence prescriptions do not arrive frequently to the pharmacy. The medicine sales generally are done through a verbal requirement by the patient.

According to legal rules and good delivery or dispensation practices, (type of pharmaceutical product, mode of administration, dosage) institutional pharmacies should only sell medicines through a physician's prescription.

#### 2.2 Supplies

Supplies are purchased through the administration of the hospital, according to the needs and economic resources availability and not through the application of a purchase program or taking into account the historical consumption. Products are entered to the general warehouse, where they are recorded in cards; these cards are up- dated but show differences that come from past years, so no effective inventory control can be made.

Supplies are accommodated without a selection criterion according to the type of product (disorderly). The out- going items from the warehouse go out done through an internal requisition, which is approved by the administration.

The warehouse only manages basic supplies in small quantities, given the limitation of economic resources does not allow larger purchases.

The hospital does not have a Purchases Committee, which it should have according to the Basic Standards for the Administration of Goods and Services. It also should have a Reception Commission.

#### 2.2.1 Human resources

The warehouse has two employees who are not familiarized with organization and management of supplies. Nor they have knowledge of ways of costing products or administrative procedures, in other words, they have no experience. They are new personnel, something that reflects the scarce stability of employees in their work posts.

#### 3. EQUIPMENT MAINTENANCE

The hospital has scarce equipment, most of it is obsolete. No preventive or corrective maintenance is made due to the lack of resources. After a detailed review of the medical equipment that exist in this hospital, the team was able to verify that no records exist, nor maintenance protocols. Moreover, there was no up- dated inventory, specifying the condition of each piece of equipment, nor manuals for service and operation, service diagrams, etc.

Some existing equipment comes from donations and not from purchases by the hospital. The Municipality, being the responsible entity for the infrastructure and equipment, does not follow a policy to economically support the hospital and does not assign resources for the physical infrastructure and equipment maintenance.

#### 3.1 Medical equipment maintenance

Due to the lack of information and / or equipment records, the team had to first elaborate an inventory, indicating the condition of equipment, which in some cases do not carry the identification plate or characteristics label.

The staff in charge of maintenance is not adequate for the maintenance jobs, due to the lack of professional preparation, hence equipment has not been subject to periodic maintenance, and deterioration has occurred in a shorter time.

Upon the base of the work performed, the team arrived to the follwing conclusions:

#### 3.1.1 Operation Room

The cyalitic lamps, that had been recently repaired, do not have parabolic reflectors, the also lack RF filters, so the illumination is not adequate for a surgical operation.

An anesthesia dispensing equipment has a broken canister support or base of the valves and soda — lime. It only Works partially, given the canister is supported to the top portion of the equipment in a rudimentary manner, that does not allow to drive a fresh gas flush to the patient; moreover it is not possible to rapidly oxygenate the patient in case this system may be required.

The hospital has an FG monitor and a pulse oximeter, however one finger sensor of this equipment is broken.

The surgical tables on both operation rooms are in bad condition, due to the lack of parts that help in the movement of elements.

#### 3.1.2 Sterilization

This service uses a sterilizer for hard material (sterilizing stove) and a horizontal manual autoclave, which is obsolete and does not guarantee good sterilization.

#### 3.1.3 Intensive care

This service only has one de-fibrillation equipment, which given its obsolescence does not guarantee good results for the service it should provide.

#### 3.1.4 X Rays

The equipment in this room is a 200 mA, 50 - 60 KVA group, without collimation systems; it is military American equipment in origin.

Support services such as oxygen and vacuum, are manual. Oxygen balloons are used, with defective pressure gauges; one suction is in bad condition.

## HOSPITAL MATERNO INFANTIL (MOTHER AND CHILD CARE HOSPITAL)

#### 1. HOSPITAL MANAGEMENT

#### 1.1 Current situation

- 70 bed hospital (35 pediatric, 35 gynecologic –obstetrics)
- Bed occupation rate: 49%
- Pediatrics bed occupation rate: 57 %
- Gynecologic –obstetrics bed occupation rate: 41 %
- Average stay in Gynecologic-obstetrics: 2 days
- Average stay in Pediatrics: 4 days
- Hospital neonatal mortality rate: 1.7 %
- Hospital's check outs: 4,588 / year
- Total Incoming patients: 4,539 / year
- N° of pre birth consultations: 1,713/ year
- Average of pre- birth consultations: 7 / day
- Total childbirths: 1,893/ year
- % of Cesarean surgeries: 16 %
- N° of surgeries: 1,157 / year
- N° of Papanicolau smears: 198 / year
- N° of X -Rays patients: 690/ year
- N° de X -Ray plates / patient: 0.7
- Total ultrasounds (ecographs): 443 / year
- Total obstetric ultrasounds (ecographs): 264 / year
- % high obstetric risk consultations: 9.5 %
- N° of full time Physicians: 13
- N° of half time Physicians: 11
- Bio- chemists, full time:: 2
- Odontologists, full time: 1
- Licensed Nurses, full time: 8
- Nurse auxiliaries, full time: 50

The above listed personnel are paid with funds from the General Treasury of the Nation. The hospital finances 13 administrative and services officers, using its own funds.

#### 1.2 Analysis by components

#### 1.2.1 Planning and organization of the hospital

No Annual Operative Plan is elaborated for any of the services, nor is the statistical information analyzed systematically. An informative bulletin was

collected, that used to be prepared during the years 1999 - 2000. It would be important to recover and provide continuity to the indicators to be defined during the training.

#### 1.2.2 Organization chart

- An organization chart exists, although it is scarcely functional. The emergency service is divided between two Heads: Pediatrics and Gynecology Obstetrics, and there is no coordination level (medical or technical).
- The hospital has a Technical Administrative Council, which holds sporadic meetings, there is no documentation.
- External consultation services are offered both in the morning and the afternoon. The shifts last 24 hours, however the "on call" system is applied, which means that the personnel is not required to stay physically in the hospital, they are only called by telephone when required.
- Through the statistical information, it can be seen that there is a marked under utilization of all the services, a larger volume of first level pathologies patients, and very little for more complex problems. 9.5% of the pre- birth consultations are of obstetric high risk.

#### 1.3 Organization of services

#### 1.3.1 Manuals of functions

A manual of Functions exists, it was prepared by an External Consultant, it has not been reviewed or up-dated, moreover it has not been put into practice.

#### 1.3.2 Medical care protocols

Only the medical care Norms from the Basic Health Insurance programs are used, EDA, IRA, PAI and Intra- Hospital Infections.

#### 1.3.3 Clinical History Management (Audit of Clinical Histories)

Eventually, the complicated clinical cases are analyzed.

#### 1.3.4 Statistics

- There is a person in charge of statistics, trained in the use of SNIS. There is no information demand from the people responsible for the services, and the information has not been systematized.
- The hospital participates in the District CAI meetings (Information Analysis Committee).
- The hospital participates in the CAI meetings through the person in charge of statistics, but there is no participation of the medical or administrative personnel.

#### 1.3.5 Committees

The hospital's Intra – Hospital Infections Committee has a good degree of development and dissemination of its activities, and also god degree of application of the norms.

#### 1.3.6 Humanization of medical care

Even though a Quality Committee does not exist, a humanized approach of medical care is applied, especially for the pediatrics service.

A group of Voluntary Women supports the hospital for the implementation of improvements and the provision of resources to give an attentive treatment to patients.

#### 1.4 Control systems

#### 1.4.1 Supervision

The hospital does not have a supervision program, nor external or internal, excepting for the one for nursery.

#### 1.4.2 Monitoring

The hospital participates in the District I CAI meetings, but those for SEDES. The services are reinforced to develop this internal practice, however it has not been provided with rules or regulations.

#### 1.4.3 Evaluation

It participates in evaluations along with SEDES and the District office, but not internally, given there is no Annual Operative Plan.

#### 1.5 Coordination with the service network

The hospital serves as reference unit both for the District and the Department; however it does not have a definite population under its responsibility, given the existence of several peripheral Firsts Level Health Centers.

This is a hospital of those called of the third level; however it does not have the resolution capacity which is adequate for this level.

#### 2. MANAGEMENT OF MEDICINES AND SUPPLIES

#### 2.1 Background

The pharmacy was created only in 1996, when SEDES provided a lot of medicines for a value of Bs. 38,869.—to support the Mother – Child Insurance and later on the Basic health Insurance. Medicines were purchased in larger quantities than needed by the insurance services and the validity or shelf life time was too short, as a consequence a loss of Bs. 28,459.30 was produced by September, 2001, due to the expiration of medicines.

With its inception in 1996, the institutional pharmacy was created as a support to the other activities proper of a hospital.

#### 2.1 Administration

The administration of the pharmacy is in charge of an employee who is a not a Pharmacist (she graduated from an Administration career), and has been working in such position since 8 years ago.

The funds collected by the dispatch of extra- insurance medicine prescriptions, are kept in the pharmacy and at the end of the day are centralized in the cashier's office from where money is used to cover the hospital needs. No cash balances are made, nor inventory controls.

An emergency medicine chest exists, under the responsibility of the night shift nurse.

#### 2.1.1 Medicine supply

The hospital has no purchase plan for the acquisition of medicines and supplies, these are bought according to need and no minimum stock criterion is used.

Medicine purchases are done upon request of the person in charge of the pharmacy to administration; administration instructs the warehouse man to obtain quotations and prepare a comparative table to award the purchase by the Administration and Direction's approval.

Medicines are entered in the central warehouse, where the pharmacy officer takes them by partial quantities.

#### 2.1.2 Medicine recording

A inventory control is used through a physical – cost card register, the records are up- dated daily, both for Basic Insurance medicines and for the extrainsurance supplies. The medicines which do not belong to Basic Insurance, receive a 15% overcharge that is added prior to sale.

#### 2.1.3 Dispensation of medicines

The hospital complies partially with good practice in the dispensation of medicines (type of pharmaceutical product, mode of administration and dosage).

The hospital complies with the norm of using essential medicines.

#### 2.1.4 Infrastructure and location

The pharmacy functions in a room that is inadequate for the management of medicines, given one person delivers the medicine and simultaneously charges for it, in other words, she is permanently handling medicines and money.

The pharmacy has three shelves a refrigerator for products that require conservation under cold conditions.

It does not have a computer as a work tool. All records and reports are done manually.

The physical location of the pharmacy is not the most adequate, because it is closer to the administrative area than the medical area, it is not readily visible and it does not provide comfort to the patient.

#### 2.2 Supplies (consumables)

As previously indicated, the hospital does no planning for its purchases, as a consequence the acquisition of medical supplies is made according to requirements and economic resources availability. A minimum inventory is kept in stock at the warehouse with medical supplies and cleaning products.

#### 2.2.1 Warehouse

The warehouse is located in a reduced physical space; it does not have furniture adequate or necessary for the good storage of products. Moreover, it does not have a computerized system for its operations control; these are done manually.

#### 2.3 BASIC HEALTH INSURANCE

The Hospital Materno Infantil (Mother and child Care Hospital) started providing services to the Mother and Child Insurance Health Services on September 19, 1999, its name changed then and it started to be called Basic Health Insurance, covering about 80 to 85% of the lending of services.

The data for the first quarter of 2002 are as follows:

	<u>Pediatrics</u>	Gyneco-Obstet.	Laboratory	Income
January	1,343	475	927	43,444.50
February	720	347	483	38,301.50
March	<u>671</u>	438	830	37,235.00
TOTAL	2,734	1,260	2,240	118,981.00

It should be noted that the clinical analysis laboratory covers 100% of the hospital needs.

#### 3. EQUIPMENT MAINTENANCE

The information provided to the team about this hospital's equipment was general, in many cases without indicating the technical characteristics generally provided by the manufacturer, nor showing the service manuals or identification plates. The hospital dos not have such information, the data described in several cases does not specify the technical characteristics of the equipment.

Moreover, no historical records were kept on the performance of each piece of equipment, where all the information about the operation and maintenance of equipment should be registered.

Preventive maintenance is deficient; consequently the operation of the equipment is not adjusted to true technical concepts.

#### 3.1 Description of the equipment

#### 3.1.1 Operating Room

Equipment in this area is completely deteriorated due to the lack of maintenance, this is the case of the anesthesia equipment with vaporizers saturated with fresh gas values out of limits, oxygen and vacuum connections without flow meters and collection flasks, tables with their base and movement rusted off, portable suction equipment without collector flasks, rusted birthing table, out- of- order inter- communicators.

#### 3.1.2 Sterilization Room

Two ZAKURA FA 360 BE autoclave machines exist, and are out- of-order, due to the lack of maintenance and the use of water that has too many suspended solids, the autoclave machines now in use are small and have the same problem that occurs with the large ones.

#### 3.1.3 X Ray Service

This service has one machine that has been under repair process since several years ago. Another unit with limited capacity is used with difficulties because it was not subject of maintenance. This is all mobile 300 mA equipment with which all the required X- Ray work is done.

#### 3.1.4 Laboratory

This area received donations of equipment, such as the double boiler, spectrometer and two binocular microscopes, centrifuges, a work chamber "DALTON" FUME HOOD, a HITACHI TO5PR centrifuge. The use of these equipment is completely limited. The water distiller is covered by a crust of hard solids, due to the hardness of the water and is out of service, in all of them there is a lack of preventive and corrective maintenance.

#### 3.1.5 Power generator

The generator group has its water and oil pre- heating systems damaged, "they don't work." The electric circuitry has not been checked, no network maintenance is done.

#### 3.1.6 PBAX telephone terminal

The main console (switchboard) is out of order, the panel ladders or cubicles, suffer a lack of maintenance, the nurses – patient call - bell system does not operate.

In numerous equipment units the parts that were supposed to be defective, and had to be replaced, have been removed and are missing; this makes a rapid repair difficult. Such is the case of the autoclave machines, and the X- Ray equipment, which were disassembled and parts removed for repair.

With the aim of getting a general vision of the condition of equipment, the most important ones were selected and subsequently inspected. However, it may be said that the remaining equipment units are in similar conditions; due to

wear by use, old age and lack of maintenance many of them have been reduced to out- of service condition.

#### Weaknesses

Lack of technical personnel that is knowledgeable on maintenance matters. Currently two employees provide the service, however they do not know about medical equipment maintenance.

#### **Threats**

Handing in equipment for repair to persons who are not knowledgeable about the specialized work needed to carry out repairs. Moreover during the inspections, it was seen that the physical infrastructure has not received maintenance, hence a risk exists that it may deteriorate faster.

#### **Strengths**

None.

#### **NOTES**

A list of the main equipment inspected follows, with specifications, name, brand, model, technical characteristics and condition.

#### QUIROFANO

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	Máquina de anestesia OHOMEDA, modelo Excel 110SE Date 1996 WI 53707 USA ventilador 700 Basic. Lámpara quirúrgica DAIICHI SOMEI, Cat NHA	F	
	100 El. Imput. 220 V 3.2A. 700W. 50/60 Hz. Bullos tipe H24501 24V. 50W. Safety F. 2Ax3 LR 41069 Serie Nº 01835280 DE 53090	F	
1	Mesa quirúrgica NAKAMURA, Medical Industry KO LTDA. 39-3.3 Chome Hongo Nideal presenta base corroída, soportes con desgastes.	FI	
1	Máquina de anestesia AKOMA, modelo PH-35 Date 1983- serie 12249, vaporizador saturado, empaques con fatiga de material.		NF
1	X RAY FILM Iluminator tipo HS – HU 3165 Date 1983.1 Machine Nº 732 220V. 50 Hz. Niua Elecric Medicinal Co. LTDA.	F	
1	Máquina de anestesia AKOMA D25 DATE 1983.5 Serie 12255, con desperfectos en su vaporizador.		NF
1	Electrobisturi MIZUKO IKA Kogio Co. LTDA. Cuting OUT PUT 1,65 MHz 130W. Coagutation OUT PUT 1,65 MHz 130W. MF6, Date 1983.1 MF6 Nº 58017252 110-220V.	FI	
1	Lámpara quirúrgica DAIICHI SOMEI Co. LTDA. CAT. N. HA75EL Imput. 220V. 1.9A 400W 50/60Hz Bullos tipe H24 – 501 24V. 50W. Safety F. 2Ax2 LR 41069, Serie No. 01835279 "DE 53090".	F	
1	Mesa quirúrgica SPL. Modelo 330N MIZUKO IKA.	F	
1	Negatoscopio de pared X-RAY FILM Iluminatore tip MS-HU315, Date 1983-1 Machine No. 733 220V. 50Hz. Niua Electric.	F	
1	Central de Vac. y $O_2$ no tienen botellas de succión y Manómetro de salida de $O_2$ .	FI	

F = En funcionamiento

FI = Funcionamiento irregular

NF = No funciona

#### QUIROFANO – SALA DE LEGRADOS

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	Máquina de anestesia OKAMA modelo D – 25 Date 1983.5 vaporizador obstruido. Serie 12256 empaques de seguridad con fatiga de material	FI	
4	Unidades de succión modelo MSP – 212 MIZUKO IKA Kogio. Serie 8063581 220 V. 187W carece de frascos o tubos colectores.	FI	NF
1	Unidad de resucitación SHARP Móvil.		NF
1	Lámpara de pie DAI – ICHI – SHOMEI KK tipo M-10 220V. Hz 50-60. Serie 12825267.	F	

#### **CENTRAL DE ESTERILIZACIÓN**

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIÓ	FUERA DE SERVICIO
2	Autoclave ZACURA modelo SP – 380 mf6 No. 435 43 MF6		
	Date Mayo 0 – 1983 220 V. Hz 50 2.3KW.	FI	
1	Calefón tipe ET - 60N PW IP 220V 3KW Date 1983 - 5		
	NIHON ITONI CO. LTDA		
1	Esterilizador Aire caliente Hoot Air HF-21 SAKURA	FI	
		F	
1	Autoclave OVALAGE SAKURA Steam Sterilicer SP 203		NF
1	Autoclave SAKURA modelo FA-3602 BE MFG-NOY		
	4211219 MF6 DATE JAN-7 1983 Presure IV. Usaje 1.5		
	Kg./Cm <sup>2</sup> Heat Soruce E PAW AC 380V. 3P 5KW 50Hz		NF
	VAC 220 IP. 0.5 Hz.		

#### **SALA DE PARTO**

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIÓ	FUERA DE SERVICIO
1	Bascula Neonatal YAMATO de 0 – 10 Kg.	FI	
1	Ebullidor.		
2	Lámparas cialiticas DKK Hospilitte CAT. N. HA. 58 EL		
1	Imput 220V 1.2A. 250W. 50Hz brillo tipo H24 501 – 24V. 50W. Safety fus 24X1 LR 41069 Serie 01835276.  X RAY FILM iluminator tipo MS – HV315 Date 1983 – 1	F	
'	Machine N. 734 V220 Hz 50 Miua.	F	
2	Mesas de parto mecánicas s/información técnica	FI	
1	Vacun Extractor NIDEAL NAKAMURA modelo CP – C Serie HC10154 V220 Hz. 50 A. 1.3 MF6 1983.5.		NF

#### **NEONATOLOGÍA**

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
3	Incubadoras FAMEN C86 TS con micro procesador C186 ST	F	
3	Incubadora NIDEAL MODELO H800 PS Serie N 1548 V220 50Hz 1.5A MF6 DATE 1983 – 5.		NF
1	Ventilador BOURNS BP. 200 V115 Hz 60 1.5W. Compresor MC30 220V modelo 3040105 Presión 58.4PSI		NF
1	NIDEAL Resucitador S 300 NAKAMURA MEA.		NF
1	Resucitador SHARP sin información con 2 tubos de O² de V3.4x2 CON Sembú ebullidor 220V. 1KW.		NF

#### **GRUPOS GENERADOR DE ENERGIA ELECTRICA**

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIÓ	FUERA DE SERVICIO
1	Motor IZUZU Diesel Modelo E120 SILS – BORE X STROKER 6–135 x 140 HM	FI	
1	Generador MEI $^\Delta$ EN modelo ZX 125 F5B Eng Mod E120 N 514869 JOB N 1A 3030LD Output 100 KVA 380V 1520 50Hz Set N125 BF $^\Delta$ 112H5 Weigth 2290 Date 1983	FI	

#### **CENTRAL DE VACIO**

ITEM	DATOS Y NOMBRES DEL EQUIPO	EN SERVICIÓ	FUERA DE SERVICIO
1	CAV Med Sistem Mod. 040 Serie 292 Compresor.		
1	CAV Med. Sistem Mod. 040 Serie 292 Compresor.	FI	
1	Receiver Tank Serie S2044 Vol. 300 Test Pres. 2Kg. X cm <sup>2</sup>	F	
1	Oxigen MT Manifold 1 - 13 - 20 - K10 - MISU - KOGURAKITA - KV - 16 cilindros.	FI	

#### SERVICIO DE LABORATORIO CLÍNICO

ITEM	DATOS Y NOMBRE DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	Microscopio OLIMPUS OPTICAL 220 – 40 V 20W 50Hz		
	Olimpus 915583 CHB.	FI	
1	OLIMPUS 304278 SZ	FI	
1	PREMIER 0028516 Micros Made in China	F	
1	Microscopio CHB OLIMPUS OPTICAL V 220 – 20 W	FI	
1	Centrífuga HITACHI 05P-21 Maz Speed 5000 RPM		
1	V100 CUR 5A H2 J0-60 MF6 Nº 53834 CAT Nº 001472	FI	
	Centrifuga HITACHI Mod. SEPDY tipo Mc-201 PPM	' '	
1	12000 V.100 Hz 50-60 MF6 Nº 21615		
	Centrifuga Micro Mod. 78103 N GERMMY KHT 400 V115	FI	
1	Hz 60 10 A RPM 12000 Serie 216526 TAIWAN	_	
1	Centrífuga H-20-100V (4000 RPM) 50 – 60 Hz.	F	
	Agitador de pepita para sangre SHAKER EKDS Mod.	FI	
1	KB-3 Serie 22803 100 V. 50-60 Hz 4 A EKAS KAYAWAKI		
		FI	

#### SERVICIO DE LABORATORIO CLINICO

ITEM	DATOS Y NOMBRE DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	Agitador Mod. KR-3 Nº Serie 22910 V100 50-60 Hz 1 A	FI	
	SPECTRONIK 20 GENESYS Mod 4001x4 KTF 4001X4		
1	SN. 356D 003036 V100 50-60 Hz 1 A	FI	
	Baño María FANEM Mod 100	F	
1	Equipo baño María C00LNICS Mod CTR 120	FI	NF
	COOLNICS Circulator CTE 120		
	Autoclave AKURA Mod. AC 3701 MFG y 4305187 Date		
1	May 1983 220 1 F	F	
	2 KW 50 Hz		NF
1	SAKURA Hot Air Dryer NK 21	FI	
	MRE MRK Ultra Water Purifier Meverse Osmosis Systen		
1	R015	FI	
	YAMATO Auto Still Mod. WF-12		
	Estufa de cultivo Incubador SAKURA Mod. 1F-38 MFG		
1	N. 1301685 Date 4-27-1983 V220 IP 50 Hz.	FI	
1	Cámara Ultravioleta Mod. ABS – 2 Serie 21789 V100 50		
	Hz A05	FI	
	Centrífuga HITACHI Tipo 05 RP-22 Maz Speed 500RPM		
	100 V 50 − 60 Hz MF6 Nº 33992-CAT 001502		
	Hot Air Sterilizer SAKURA H-21		
	Cámara – Jame Hoods – DALTON (no es usada)		

#### **PATOLOGIA**

ITEM	DATOS Y NOMBRE DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	Estufa NN BG 530780 - 931-220 V 1600 W 220°C	FI	
1	Medical Freezer SANYO Mod. 230 V220 50 Hz Cap. 65	FI	
1	Kgs.	FI	
1	SANYO BLOOD BANK Refrigerator Mod NBR 105 220	FI	
1	V 50 Hz 1 A 143 W	FI	
1	Microfono de destlizamiento ERMA OPTICAL – WORKS Microscopico OLIMPUS CH	F	
1	Microscopioco BSC-220 V – 50-60 Hz MADE IN CHINA	FI	
1	Microscopico OLIMPUS CHB 719272 220 V 50 Hz MADE IN JAPAN Solido Wermer Mod. PS-51 MADE IN JAPAN	FI	

#### **RAYOS X**

ITEM	DATOS Y NOMBRE DEL EQUIPO	EN SERVICI O	FUERA DE SERVICIO
1	Medical Equipament TOSHIBA Mod. DC 12 MB – 1 Diagnostic X Ray Sparatus Mod. Kx0 12 Imput 1 phase 50 – 60 Hz 175 – 275 V MAZ imput PW 50 KVA Output 100 KVP 500 MA 125 KVp 300 MA 100 KVP 4 MA Serie		NF
1	T2604726  Medical Equipament TOSHIBA Mobile Mool KCK-10 M GAT Imput 1 P 50-60 Hz 160-260 V 1KVA Output 100 KV	FI	
1	10 MF Equipo de Rayos X NANODOR SIEMENS Revelados Manual TX-752		NF

#### **ECOGRAFIA**

ITEM	DATOS Y NOMBRE DEL EQUIPO	EN SERVICIO	FUERA DE SERVICIO
1	SIEMENS PRIMA Sonoline 2 transductores 1 sector 3.5 1		
1	intracavitorio. Diagnóstic 4900531 – LH 200 cat. H 4900564 – LV 300 Serie H. BCE 2667 MADE IN USA TOSHIBA SONOLAYER – M Mod. SAL – 20A V220 50 –	F	
	60 Hz 15.0 VA Serie N T257233.	FI	
1	CARDIOFAX NIHON KODEN Mod. EA 5104 Serie 15-555.	FI	

#### **CONCLUSIONS**

The survey of information from the German Busch and Materno Infantil Hospitals in Trinidad carried out by the consultant team was done with the aim of establishing the current conditions in which they are in regard to three aspects: (1) Hospital Management, (2) Medicines and Consumables Management and (3) Maintenance of Medical Equipment. The purpose is to design the scope of a Technical and Practical Training Program for those areas in order to strengthen the Hospitals Management in Trinidad.

Although the time assigned of one week in the city of Santa Cruz de la Sierra and another week in the city of Trinidad is too short to provide an effective training, a program of tasks to be performed has been included, as a product of the Training Workshop. This will go through a stage of monitoring and evaluation, and if the case comes to be, a stage of reinforcement, with a previous agreement between parties, SSC and the Consulting Team.

The contents of each technical and practical training area, and the time schedule for carrying them out, has been developed by specialists of renowned academic formation and professional experience.

July, 2002

### ANNEX A

# INVENTORY OF MEDICATION HOSPITAL GERMAN BUSCH

## INVENTARIO DE MEDICAMENTOS DEL HOSPITAL GERMAN BUSCH

CANTIDAD	NOMBRE DEL PRODUCTO	FORMA FAR.	VENCIMIENTO	costo
41	Branula 20 .	Pieza	11-Mar	350
79	Branula 22	Pieza	06-Jun	350
42	Branula 18	Pieza	04-Jun	350
8	ACD -500 ML.	Bolsa	11-Mar	23
29	Acerdil	Tabletas	03-Abr	540
30	Acerdil D.	Tabletas	03-Abr	540
97	Adalat	Capsulas	03-Mar	72
36	Adalat	Comprimido	08-Abr	30
45	Adrenatina	Ampolla	09-Mar	2,35
20	Algodón de 100 g.	Paquete	S/V.	<u> </u>
15	Algodón de 200 g.	Paquele	S/ V.	10
54	Alcogin	Tabletas	06-Jun	0,47
100	Alergen	Comprimido	12-Mar	0,47
60	Alprasolan de 0,5	Comprimido	10-May	0,42
27	Alprasolan de 0,25	Comprimido	03-Mar	0,63
· 7	Alfatosin	Jarabe	06-May	12,45
6	Aloferine	Ampolta	03-Feb	15
7	Ambroxol	Jarabe	11-Feb	10,5
56	Ampicilina de 1 gr.	Frasco , Ampolla	03-Mar	2,45
322	Ampicilina de 500 mg.	Capsulas	04-Mar	0,34
115	Amoxicilina de 500 mg.	Capsulas	01-May	0,34
28	Ampicilina de 1 gr.	Capsulas	03-Mar	0,91
7	Amoxicitina de 1 gr.	Frasco , Ampolla	08-Mar	7,2
	Aminofilina	Comprimido	03-Abr	0,67
10	Aminofilina	Ampolla	12-Mar	2,5
	Anara	Comprimido	08-Jun	0,61
_1_	Suero antitetanico de 5,000	Frasco , Ampolla	09-Feb	27
11	Suero antitetanico Anatoxal	Ampolla	07-Abr	5,07
13	Suero antitetanico de 3,000	Ampolla	10-Mar	30
535	Aspirina	Tabletas	04-Mar	0,5
	Atropina	Ampolla .	05-Mar	1,5
	Atlansil	Tabletas	01-Abr	3
	Avamigram	Tabletas	•	2
	Basitracina	Tubo	04-Abr	5,2
	Basitracina	ungüento	06-Abr	9,10
-17	Bicarbonato	Ampolla	07-Feb	3
	Bromexina	Jarabe	05-Abr	5,75
	Bromexina	Ampolla	10-Mar	4,95
10	Brevex	Tabletas	08-Abr	2,15
	Betacar 50 mg.	Comprimido	07-Abr	2
	Bupiros	Frasco , Ampolla	11-Feb	20
	Bupiroc	Ampolla	06-Mar	19.5
978	Carbón Medicinal	Comprimido	11-Jun	0,39

8	Catgut Cromado 0	Sobres	02-May	10,5
46	Calgut Cromado 1	Sobres	06-Jun	10,5
22 .	Catgut Cromado 2-0	Sobres	11-May	9,2
26	Catgut Cromado 3-0	Sobres	01-Jun	10,5
19	Catgut Cromado 4-0	Sobres	09-Abr	9
10	Catgut Simple 1	Sobres	02-May	10,5
24	Catgut Simple 2	Sobres	10-Mar	10,5
472	Calmadol	Tabletas	10-Jun	0,15
5	Cardioaspirina	Tabletas	07-Feb	0,6
43	Ceftriazona de 1 gr.	Frasco , Ampolta	02-May	23,3
22	Cefotaxima de 1 gr.	Frasco , Ampolla	04-Abr	9,10
5	Cedilanid	Ampolla	06-Feb	4
84	Cefalixina	Capsula	05-Abr	1.98
48	Cefradina	Capsula	01-May	28.23
25	Ciprofloxacino da 500 mg	Capsula	04-Abr	1.5
63	Cisaprida	Tabletas	10-Mar	0.6
3	Ciproval	Unguento	09-Mar	35,65
16	Cinaricina	Comprimido	10-May	0,32
1000	Cotrimoxasol 400 /800	Tabletas	08-May	0,15
151	Cotrimoxasol 400 /800	Tabletas	10-Mar	0.13
8	Clotrin	Ungüento	05-Abr	17,9
40	Compresa de Gasa	Piezas		1,33
90	Complejo B	Ampolla	06-Mar	0,75
200	Complejo B	Ampolia	· 06-Mar	_ 1
100	Cofalgina	Ampolia	06-Abr	1,9
18	Cotipiren de 4 mg.	Ampolia	09-Abr	9,50
24	Cortipiren de 5 mg.	Comprimido	07-Abr	0,45
84	Curitas	Unidades	03-May	0.11
74	Disgestan	Sobres	11-Jun	1,15
4	Dolgenal	Ampolla	11-Feb	8,16
10	Dolgenal	Comprimido	06-Abr	3,2
5	Dopamina	Ampolla	06-Jun	7,5
11	Dicinone	Comprimido	07-Abr	3,5
102	Digoxina	Comprimido	03-May	0,4
150	Olcloxacilina de 500 mg,	Comprimido	04-Abr	1.6
120	Dicloxacilina de 500 mg.	Comprimido	04-Abr	1.48
21	Dicloxacilina de 1 gr.	Frasco , Ampolta	12-May	5,2
94	Dioxadol	Ampolla	09-Mar	5
183	Dioxadol	Tablelas	02-Mar	0,8
10	Dextrosa al 10% de 1000 ml.	Frasco	01-Jun	6,5
20	Dextrosa al 10% de 1000 ml.	Frasco	04-Jul	7,6
10	Dextrasa al 5% de 500 ml.	Frasco	05-May	5
50	Dextrasa al 5% de 1000 ml.	Frasco	04-Jul	6,95
12	Deflamat	Gel	08-Mar	18,75
24	Diciofenac de 75 mg.	Ampolla	02-Mar	1,3
190	Dicilofenac 100 mg	Tabletas	04-Jul	0,76
116	Dictofenac de 75 mg.	Tabletas	03-Jun	8,0

. 20	Desamet 0.5 :	Tabletas	10-Mar	0,32
75	Desamet 4 mg.	Ampolia	05-Abr	
57	Desamet 8 mg.	Ampolla		2,65
14	Donner Dijes	Tabletas	01-Abr	4
33	Donper 10 ml.	Tabletas	10-Mar	0,94
31	Donper	Ampolla	10-Mar	0,86
19	Deidrobenzo	Ampolia	09-Abr	5
100	Diprirona		10-Abr	9,24
24	Dexon 1	Ampolla	12-Abr	1.9
5	Dexon 2-0	Sobres	07-Jun	17,2
14	Dafilon 6-0	Sobres	O1-Abr	16
10	Dineomogrann	Sobres	10-Abr	
9	Dextromerfano	Jarabe	09-Mar	17,05
20	Diposen	Jarabe	04-Jul	5,5
13	Dolalgial Relax	Tabletas	01-Jun	0,62
47	Equipo de Suero	Tabletas	10-Feb	1,85
148	England de 30870	Pieza	SN.	2.6
5 .	Enalapril de 10 mg.	Tabletas	08-Abr	0,40
<del>- 5</del> -	Espasmo Dioxadol	Tabielas	06-Abr	1,4
. 27	Espasmo Dioxadol	Ampolla	11-Mar	8,21
4	Eritromicina de 500 mg.	Tabletas	04-Jun	0,85
	Efortil	Ampolla	10-Feb	2,5
28 7	Fluxus 10 mg.	Tabletas	06-Abr	2,05
	Flogenes Relax	Tabletas	06-Abr	2,05
276	Famotidina 40 mg.	Tabletas	03-Mar	0,5
6 16	Fungotar	Tubo	09-Abr	15
50	Fungofar	Tabletas	12-Abr	1,43
	Fisiologico de 1000 ml.	Frasco	<b>05-J</b> ⊔I	6,10
14	Fisiologico de 500 ml.	Frasco	06-May	4,5
6	Fentanii de 10 cc.	Ampolia	O9-May	27
- 66	Gentamicina	Ungüento	11-Feb	17
1500	Gluconato de Calcio	Ampolla	11-Mar	3,1
52	Glibenciamida	Tabletas	10-May	0,08
38	Gentamicina do 80 mg.	Ampolta	0∂-Abr	1,5
9	Gabroral 250 mg. Hipnol	Tabletas	11-Abr	5,16
25		Ampolla	06-Mar	6,67
<u>25</u>	Hipertrosa 33%	Ampolia	nuL-80	3,05
18	Imgor Forte	Tabletas	01-Jun	0.63
12	lib) duo	Tabletas	10-Mar	2,28
142	Ibuprofeno 400 mg.	Tabletas	01-Mar	8.92
-17	Isordil	Tabletas	05-Abr	0,21
123	Indosid de 25 mg.	Tabletas	07-Feb	0,35
175		Tabletas	12-Feb	0,18
109	Infex DU	Tabletas	11-Feb	11,45
173	Jaringas de 1 ca.	Pieza	S/V.	0,7
833	Jeringas de 3 cc.	Pieza	SN.	0,47
033	Jeringas de 5 cc.	Pieza	S/V.	0,45

<u> </u>	<u> </u>			
181	Jeringa de 10 cc.	Pieza	SN	0,62
43	Jeringa de 20 cc.	Pieza	SN	
118	Klasidol .	Tabletas	02-May	1,3
21	Klosidol	Ampolla	04-Abr	1.8
2.	Ketalar	Frasco, Ampolia	11-Feb	7,5
34	Lasix	Ampella		8,5
99	Lasix	Tabletas	07-Feb	0,55
10	Leche Magnesia	Frasco	OB-Mar	0,4
12	Lidocaina de 20 cc.	Frasco	01-May	3.25
38	Loperamida	Tabletas	02-Abr	5,6
8	Levulosa al 5% de 1000 ml.	Frasco	09-Mar	0,5
112	Multivit	Tablelas	12-May	21
67	Mentizan Plus Dia	Sobres	01-Jun	0,42
62	Mentizan Plus Noche		06-Abr	2,48
38	Mentofar	Sobres	06-Abr	2,48
13	Mentizan Pastilla	Unguento	SN	2,9
135	Mariposa 22	Sobres	O8-Abr	7
92	Mariposa 19	Sobres	S/V	0.61
246	Metronidazol de 500 mg.	Sobres	SN	1,10
27	Metrocaps	Tabletas Capsulas	12-May	0,38
-100	Metrocaps	Capsulas	03-Mar	1,42
5	Microgolero	Pleza .	OB-Abr	1,2
10	Microgotero	Pieza	O6-Jun	16
20	Manitol at 20%	Frasco	07-May	4
4	Migradioxadol	Tabletas	11-Jun	20
8	Neutravit Plus	Jarobe	09-Abr	1,65
9	Neutravit	Jarabe	02-Jul	11,10
10	Neocodion :	Tabletas	02-Jul	10,3
58	Norflox 400 mg.	Tabletas	07-Mar	2
1	Narcan	Ampolia	03-Jun	1,2
30	Nefoben 300 mg.	Tabletas	09-Feb 09-Mar	25
18	Nozinan	Tabletas	10-May	1.73
24	Noxon 500 mg.	Tabletas	11-Abr	2
4	Oftalvitamicina	Gotas	12-May	6,12
4	Otazol	Gotas	05-Mar	9,4
5	Oftazona N	Golas	10-Abr	14 34.7
3	Oltazona N	Ungüento	06-May	
5	Oflagen C	Gotas	10-Abr	28
5	Oftagen	Ungûento	05-May	30,25
8	Pulmoquin de 2 cc.	Ampolia	09-Jun	24,7
50	Pulmoquín de 5 cc.	Ampolla	12-Jun	1.93
40	Propanolot 40 mg.	Tabletas	05-ปูนก	3.89
4	Plexus	Tablelas	O1-Mar	0.5
34	Penicilina Benz de 1,2 m,	Ampolla	04-Abr	2,4
13	Penícilina Procainica de 400 m.	Frasco, Ampolia	05-Abr	3,35
58	Penicilina Procainica de 800 m.	Frasco , Ampolia	01-May	14
23 .	Penicilina sodica de 5, m,	Frasco, Ampolia	08-Abr	5

26	Penicilina sodica de 10, m.	Frasco, Ampolla	01-May	12,37
. 37	Pantera	Sobres	06-Mar	·
<u>4</u> 19	Paracetamol de 500 mg.	Tabletas	07-Abr	1,15
103	Prednizona de 5 mg.	Tabletas	12-Mar	0,16
132	Prednizona de 20 mg.	Tablelas		0,37
65 .	Potasio	Ampolla	01-Abr	0,86
8 .	Polasio	Jarabe	01-Abr	1,8
19	Plasil	Ampolla	11-Jun	18,2
12	Plasif	Tabletas	- 06-May	2,5
16	Prostigmine		11-May	0,7
37	Praxis de 200 mg.	Ampolia	09-jun	3
1	Quemacuran	Tabletas	07-Mar	1,63
4	Remasol	Tubo	Ot-Mar	24,8
20	Retiblan de 100 mg.	Frasco	10-May	11,2
77	Relaxvita	Capsulas	04-Abr	0,84
12	Roxeleaina	Tabletas	11-Jun	1,08
77	Restriol	Gel	10-Feb	22,6
29		Tabletas	12-Jun	0,44
98.	Ringer N - de 1000 ml.	Frasco	11-Jun	6,5
10	Ringer L-de 1000 ml.	Frasco	05-Jul	7,2
28	Recolector de Orina	Pieza	S/V.	4,074
10	Relacepan de 10 mg	Ampolla	11-Feb	1,2
. 38	Relacepan de 5 mg.	Tabletas	04-Mar	0,5
100	Relacepan de 10 mg.	Tabletas	08-Mar	0,46
69	Ranitidina de 50 mg.	Ampolia .	10-Mar	2
273	Ranitidina de 300 mg.	Tabletas	01-Abr	0,69
90	Ranitidina de 150 mg.	Tabletas	07-Abr	0,40
	Salbutamol de 4 mg.	Tabletas	04-Jun	0,52
<u>96</u> -	Supositorio de Glicerina	Unidad	10-Jun	1,3
41	Sertal Sustrate	Tabletas	12-Feb	2
10	144364	Tabletas	12-Feb	0,74
12	Sintocinon	Ampolla	11-Feb	2,5
1	Sonda N-G-18	Unidad	09-Mar	3,5
9	Sonda Folei 18	Unidad •	11-Feb	14
9	Sonda Folel 22-3v	Unidad	10-May	25
	Sonda Folei 16	Unidad	11-Mar	10,7
23	Seda 1	Sobres	02-Jun	9
11	Seda 2-0 Seda 3-0	Sobres	02-Jul	9
12		Sobres	10-May	11,5
	Seda 5-0	Sobres	06-Mar	8,5
5 4	Sosegon	Ampolla	06-Abr	21
	Sistalgin	Ampolia	06-Abr	9
16	Tricobit de 1 gr.	Tabletas	07-Abr	4,72
130	Terracolin	Tabletas	08-May	0,39
3	Tronbofol	Pomada	01-Abr	16
108	Tosalcos	Sobres	09-Jun	0,44
25	Terbocil 2.4 m.	Frasco	08-Abr	6,22
25	Terbocil 6,3,3	Frasco	11-Abr	3.5

25	Terbodil 6,3,3	Frasco	11-Abr	2.8
7	Terbocil Forte	Frasco	08-Abr	8.5
. 39	Urofar	Capsulas	12-Feb	0,95
95	Vitalgina	Tabletas	10-Jun	0,28
57	Vita C	Ampolla	08-Jun	2,8
62 ·	Vita C	Tabletas	05-Mar	0,5
16	Viadil	Tabletas	12-Fe5	. 1,8
18	Viadil	Ampolla	04-Mar	8,5
20	Vita K	Ampolla	06-Feb	1.5
19	Venda de Gasa de 10 cm.	Unidad	S/V.	4,8
43	Venda de Gasa de 10 cm.	Unidad	S/V.	3,65
34_	Vendad de Gasa de 15 cm.	Unidad	S/V.	6,5
2	Valpax	Tabletas	04-Mar	0,98
14	Valpax	Tabletas	04-Mar	
1	Yodo povidona	Frasco	07-Abr	
28	Yeso de 20 cc.	Unidad	06-Mar	12
11	Zetic	Tabletas	03-Abr	2,86
36	Zindol	Tabletas	10-Abr	1,6

### ANNEX B

# TARIFF FOR HOSPITAL SERVICES HOSPITAL GERMAN BUSCH

ARANCEL POR SERVICIOS HOSPITALARIOS	
Hospitaliz, Pensionado p/día	40,00
Hospitaliz, 1/2 Pensionado p/día	30,00
Sala Pensionado Acompañante con o sin alimentos, por día	30,00
Hospitaliz. Sala General p/día	15,00
Derecho de Quirófano en Sala Pensionado	10100
Cirugía Mayor	250.00
Cirugía Mediana	190,00
Cirugía Menor	150,00
Coxlangiografia intraoperatoria	100,00
Derecho de Quirófano-Medio Pensionado.	100,00
Cirugía Mayor	200.00
Cirugía Mediana	150.00
Cirugia Menor	120.00
Contangiografia intraoperatoria	100,00
Derecho de Quirófano-Sala General	
Cirugía Mayor	150,00
Cirugia Mediana	110,00
Girugia Menor	90,00
oomangiogram maoperatoria	100,00
Derecho de Pre-Quirófano (Paciente Ambulatorio).	
Extracción cuerpos extraños	30,00
Extracción de Quistes	30,00
extracción de uñas	30,00
Otros Servicios	· · ·
Cuidados intensivos por día U.T.T.	50,00
Electrocardiograma	50,00
Oxigeno por libra	0,30
	_ [
Touteun Trinidad, Julio de 1997	W
ADMINISTRACED HOSEPACE COMMENT OF STATE	-c)*

Hoapitel 'Gormân Busch' H. Alesidia Municipal de Trinidad <u>Trinidad-Bani</u>

#### TARIFAS POR SERVICIOS EN RADIOLOGÍA HOSPITAL "GERMAN BUSCH"

	1,-	Columna Dorsal (2 Proyectiones)	100,00	
	2	Columna Lumbo Sacra (2 Proyecciones)	100,00	
	3	Colangeografía Intraoperatoria (2 Proyecciones)	100,00	
	4.	Colangeografía Post-operatoria (2 Proyecciones)	100,00	
	5	Columna Cervical (2 Proyecciones)	80,00	
,	6	Radiografía de Sacro-Coxis f y p (2 placas)	80,00	
	7	Radiografía de Tórax A.P	50,00	
	0,-	Seriado Gastroduodenai p/Piaca	50,00	
	9	Radiografía Colom p/Enema (p/Placa)	50,00	
	10	Radiografía de Abdómen Simple de pie (1 Placa)	50,00	
	11.•	Urografía Excretora o Pielografía descendente (p/placa)	50,00	
	12	Radiografía de Cráneo (p/placa)	50,00~	•
	13,-	Radiografía de Brazo, Frente y Perfil	50,00	:
	14	Radiografía de Muslo, Rodilla, Pierna F y P	50,00	į
	15	Radiografía de Pelvis o Caderas frente († placa)	50,00	•
	16,-	Radiografía de Clavícula, hombros, antebrazo, mano, codo	40,00	
	17	Radiografía de tobillo-pie f y p	40,00	
	18	Radiografía de senos para-nasales M.N.P.(1 placa)	40,00	
	19	Radiografía Temporo Maxilares p/Placa	40,00	
	20,-	Perfil de huesos propios de la naríz	40,00	
	21	Calcárico axial y lateral	40,00	
	22,-	Perfil de cavum faringeo	40,00 /	
	,			

Trinidad, Julio de 1997

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#### Kooplist 'Germân Busch' H. Alasidia Municipal de Trinidad Trinidad-Boni

	ARANCEL POR SERVICIOS DE ANALISIS	
l	CLINICOS DEL "HOSPITAL GERMAN BUSCH".	·
l	CLIMIOGO DEL TITO	
<sub>1</sub>	HEMOGRAMA COMPLETO Bs	25,00
2	REACCION DEL WIDAL	25,00
3	ACIDO URICO	25,00
1 -	CREATININABs	25,00
4	UREABs	25,00
5	GLICEMIABs	20,00
6	PROTEINA C REACTIVA Bs	20,00
7	TEST DE LATEX	20,00
1	FACTOR REUMATODEO	20,00
8	PRUEBA DE EMBARAZO Bo	20,00
10	EXAMEN DE ORINA COMPLETA	20,00
111	GRUPO SANGUINEO Y FACTOR R.H	15,00
12	TIEMPO DE COAGULACION Y SANGRIA Bs	15,00
113	ERITROSEDIMENTACIONBs	10,00
14	HEMATOCRITOB6	10,00
15	HEMATOCHITO	10,00
16	EXAMEN PARASITOLOGICO 8s	
1.	7 COLESTEROL	25
12	BILIURUBINAba.	25
19	9 TRIGLICERIDOS Bs.	25:-
20	HEMOGLOBINABs.	15.4
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TRINIUAU, JULIO UŁ 1998

	TARIFAS POR DIFERENTES	
	SERVICIOS HORRITAL AGUAR	
	SERVICIOS HOSPITALARIOS ATENCION EN SERVICIOS DE EMERGENA	ļ
	EMERGENCIA	
	1 Lavado Gástrico	
- 1	2 Sutura Mayor (6 puntos arriba) Bs. Bs. Bs. Bs. Bs.	30,00
1	3 Sutura Mediana (3 a 5 puntos)	25,00
	3 Sutura Mediana (3 a 5 puntos) Bs. 4 Drenales-Abscesos	20,00
1	4 Drenajes-Abscesos	20,00
ı	5 Extracelón de uña	20,00
ı	6 Extracelón de cuerpo extrario	20,00
	annihilativiti	20,00
ı		15.00
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ļ	SERVICIO DE AMBULANCIA	
	- animal at notio batadol"	30,00
	amora a coma odarez	30,00
	- Annota a Lipatto Danialisti	20,00
	A madeira Offdist	20,00
	5 Carrera a Cárcel de Mocoví	20,00
	6 Carrera a Puerto Almacén	15,00
	7 Carrera a Aeropuerto	15,00
	8 Carrera a Villa Vecinal Bs. 9 Carrera dentro dal Radio Habana - fra	10,00
	9 Carrera dentro del Radio Urbano, c/u	5,00
	10 Carrera fuera del Radio Urbano, Paitili y Villas Vecinales c/u Bs. 11 Carrera al Aorpuerto, c/u	10,00
	12 Carrera al Area Burattonnianalment de	15,00
	12 Carrera al Area Rural(convencional de acuerdo a la distancia) Bs.	15,00
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	TARIFAS POR SERVICIOS DE ENYESADOS EN EL HOSPITAL "GERMAN BUSCH"
	DERECHO A YESO MAYOR EN PRE-QUIROFANO BAJO ANESTESIA
l	YESO MAYOR EN CONSULTORIO EXTERNO:
ļ	- CALZA DE YESO Bs. 30,00
	- INGUINO O CRUROPEDICO Bs. 30,00
[	- PELVIPEDICO Bs. 30,00
ı	- CORSE Bs. 30,00
ŀ	
	DERECHO A YESO MENOR EN PRE-QUIROFANO CON REDUCCION
ı	BAJO ANESTESIA
١	VECO. MENOR EN CONCENTORIO ENTENDO
Į	YESO MENOR EN CONSULTORIO EXTERNO:
	- BOTA DE YESO
1	- BRAQUIO PALMAR Bs. 20,00
1	- ANTEBRAZO PALMAR
Ì	- MANO Y DIGITALES
ı	95. 20.00
ı	Trinidad, Julio de 1997
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### **ANNEX C**

## INVENTORY OF MEDICATION HOSPITAL MATERNO INFANTIL

#### INVENTARIO SEGURO BASICO DE SALUD AL 09/04/2002

	DETALLE	UNIDAD	i "
√ 23.00		Fco.	
	Cotgut simple O	Sobre	
20.00		Amp.	
/ 100.00		Tab,	
<u>√</u> 70.00	Penicitina	Fco.	
√16,00	Ampicilina	Fco.	
√150.00	Penicilina Procatnica	Fco.	
/2,000.00	Paracetamol 100 mg.	Tab.	
/1,000,00	Cotrimoxazol	Tab.	
✓ 50.00	Penicilina Benzat		
¥ 5.00	Feotanil	Fco.	
	Oxitocina I ml.	Amp.	
Z400.00	Atropina I mg.	Amp.	
100.00	Vitamina K I ml.	Ainp.	,
./- 50.00	Indomotacina Susp.	Amp.	
J 50.00	Branula No. 22	Cap.	
√ 98 nn	Branulas No. 18	Unid.	!
Z 58 00	Catgut alleggio A CRanado es	Unid,	ļ
Z 12 00	Dexon 0	Unid.	
	Mebendazol	Sourc	
2 450 00	Nitrofurantoin	Tab.	
4/100.00	Dipirona 1 gr. i	Tab.	
7 100.00	Orbitona 1 gr. i	Amp.	
V 100.00	Celotaxima I gr.	Fco.	
V100.00	Agua Destilada	Fco.	
30.00	Calgut Cromado 2 - 0	Sobre	
L 195,00	Ergometrina 1 ml,	Amp,	
7 200.00 i	Gentamicina 80 mg.	Amp.	
7 70,00	Gentamicina 10 mg.	Amp.	
<b>→ 5.00</b>	Ketamine 10 mg.	Fco,	
V10.00	Thiopental 1 gr.	Fco.	
2000.00	Sales Rehidratación	Sobre	
2 020,00	Ampicilina 500 mg.	Cap,	
V 2.00	Epinelrina 1 mg.	Amp.	
	Penicilina Sodica 30,000,000	Fco.	
( DO 00 )	Natrium 20 ml.	Amp.	
7 00.00 4100.00	Jeringas 10 ml Diazepán Simt	Unid,	
7 100.00	Diazepan 5 mi.	Tab.	Ì
7 00.00	Magnofina 10 ml.	Amp.	}
V 100 00	Potasio 10 mi	Ainp	ļ
× 200.00	Mariposa No. 21	Unid.	ĺ
√ 121.00	[Manposa No. 23	Unid.	ĺ
√ 15.00	Sonda Nasogastrica	Unid.	1
V, 60.00	Sucro Glusosado, 500 ml.	Fco.	ĺ
V 192.00	Sucro Devirosa 5 % 1000 mil	Pco.	ĺ
∠412.00	Suero Fisiolónico 09 % 1000 ml.	Fco	l
<u>/4,750.00</u>	Sulfate Ferrese 20 mg.	Сар.	1
V 11.00	Aceite Vitaminado	Fca,	ł

Pagina 5

Hoja1
FONDO ROTATORIO MEDICAMETOS VENCIDOS Y DADOS DE BAJA

				1		
CANTIDAD	DETALLE	UNIDAD	P/ U	PIT	P/VTA	A/TOTAL
200	Bromoxina	Fco.	4.40	880.60	6.00	1200.00
300	Dextrometorjano	Fco.	4,70		6.00	1800,00
60	Entromicina 125 mg.	Fco.	6.70	1 522.00.	10.00	600.00
	Paracetamol Jise.	Fco.	4.00	308.00	6.60	462.00
	Amaxicitina 125 mg.	Fco.	6.30	441.00	6.00	560 00
	Guayacolato	Fco.	3.95	904.55	6.00	1374:00
240	Ampicitina 125 mg.	Fco.	5.95	1428.00	7.00	1680.00
	Norfloxacina	Tab.	3.80	1854.40	4.50	2196.00
	Amikacina 100 mg.	Amp.	12.00	360.00	14.00	_
. –	Penicilina Benzatinica 2400	Fco.	4.30	559.00	5.00	420 00
1 1	Penicilina Procainica 400	Fco.	3.10	370.00	4.50	350.00
1 i	Aztemizol	Fco.	18.10	866.90	21.00	436.50
7	Metronidazol Jarahe	Fca,	10.30	463.50	12.50	1029.00
	Metronidazol 500 mg.	Tab.	0.48	655.68	0.80	562.50
I . i	Terbeell 1200	Fca.	3,30	943.80	4.50	1092.86 1287.00
4 <u>9</u> 5	Acido Pipemidico	Tab.	1.13	559.35	2.00	990.00
1 1	Keloconazol 100 mg.	Tab.	3.00	1360.00	3.50	1610.00
142	Ketoconazol Crema	Tubo	20.01	2841.42	22.00	3124,00
. 1177	Mebendazol	<b>T</b> ab.	0.36	423.72	0.50	588.50
14 4	Benzoato de Benzilo Crema	Tubo	7.00	99,00	10.00	140.00
210	Aztemizal 10 mg.	Tab.	1.35	283.50	1.50	315.00
45	Amiodarona 200 mg.	Tab.	1.20	54.00	1.50	67.50
<u>-61</u>	Thiabandazol 350 gr.	Tab.	0.83	50.63	1.50	91,50
400 .	Enziapril Malesto 10 mg.	Tab.	1.13	452.00	1.50	00,000
2081	Eritromicina	Tab.	0.74	1539,94	1.00	2081.00
9	Complevit	Fco.	14,00	126.00	18.00	162.00
114	Dexametazona	Comp.	0.27	30.78	0.50	57.00
	Mapesil Jbe.	Fca.	18.00	152.00	21.00	169.00
	Metronidazol 250 gr.	Сотр.	0.48	165.60	0.70	241.50
	Penthotal	Fca.	8.00	48.00	10.00.	60 00
	Tetraciclina 50 mg.	<u>Can.</u>	0.30	59.70	0.50	99,50
	Cottonoxagol (100/80 gr	Tals.	0,24	300.00	0.50	750 00
100	<u>Ergometrine</u>	Tab.	0.30	30 00	0.50	50.00
	Viadij	Amp,	5.70	200.80	7.00	303.00
1 2000	Viadil	Tala.	1.50	570.00	2.00	760.00
<del></del> ;	Metodina Susp.	Foo.	60.44	906,60	<u>55</u> .00	825.00

Nidalia Medialia (Nidalia Encargada de Parimadia Hospital Metarno Intensil

Hónica Chávez OHZ. Fragada de Almaceras.

#### INVENTARIO FARMACIA FONDO ROTATORIO -AL 09/04/2002

CANT	DETALLE	
· V 200 00	Oxitocina 1 ml	UNIO.
/ 200.00	Jeringas 3 cc.	Amp.
/100.00	Incode S CC.	Unid.
<u>√ √ √ √ √ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</u>	Nifedipino 10 mg,	Cap.
7 30.00	Ampicilina Sódica 250 mg.	Fco.
/100.00	Compleje B	Amp,
V 100.00	Dexametazona 8 mg.	Anip.
23.00	Adrenalina 1 gr.	Amp.
V1,1X0.1K1	Paracelamol 500 mg.	Tab.
7 10,00	Eritromicina 125 mg.	Fco.
7 9.00	Dicloracilina 250 ml.	Fco.
V 300.00	Ergometrina 1 ml. 0.2 %	Amp.
V 50.00	Amicacina 100 mg.	Fco.
1 25.00	Arricacina 500 Mg.	Fco.
√ 200.00	Natrium 20 ml.	Amp
√ 10,00	Penicilna Benzatinica 1.200.000	Fco.
/ 1000.00	Penicilina Sódica, 1 000 000	Fco.
<u> </u>	Ampiclima 1 gr.	Fco.
7.20,00	Metronidazol 600 mg.	Foc.
<u>/10.00</u>	llamet 125 mg.	Fco.
<u> ~20.00</u>	Paracelamol 15 ml.	Gotas
<u> -/ 15.00</u>	Penicilina Benzatinica 2,400,000	Fco,
<u></u>	(Diclotenaço 50 mg.	Tab.
✓ 500.00	Sulfato Ferroso	Tab.
29.00	Sonda k + 33	Unid,
√ 50.00	Penicilina Procalnica 400 000	Fco.
20.00	Atropina 1 mg. sulfato	Amp,
<u>/100.00</u>	Jeringas de insulina	Unid,
∠500,00	Jaringas 5 mt.	Unid.
<u> </u>	Amoxicilina 500 mg.	Cap.
<u>√1,600.00</u>	Ampicilina 500 mg.	Cap.
7 640.00	Diposan Dexon "0"	tab.
<u> </u>	Dexan "0"	Soure
V 35.00	Dexon 2-0	Sobre
	Dexon 1	Sobra
/21.00	Seda negra 2 - 0	Sobre
V 223.00	Equipos de sucro	Unid.
V 3,00	Micogulero	Unid.
√ 23,00 √ 555 55	Glucosa al 10 %	Unid.
× \$30.00	Kardex W Of celeste	Unid.
√290.00	Kardex T/O verde	Unid.
/195.00	Kardex S.B.S. Amarillo	Unid.

. /10 Bicarbonato 20 mi.	 Amp.
6 Aquja de Sutura	 Unid.
√500 Paracetamof 500 mg.	 Tab.

Truga Esperifica circizata.
CONTADON
Hospital Materia Ina III

Página 6

#### JAPAN INTERNATIONAL COOPERATION AGENCY

#### PREFECTURE OF BENI DEPARTMENT GOVERNMENT OF THE REPUBLIC OF BOLIVIA

#### STUDY ON ENHANCEMENT OF DISTRICT HEALTH SYSTEM FOR BENI PREFECTURE

#### PROGRESS REPORT

- HOSPITAL GERMAN BUSCH
- HOSPITAL MATERNO INFANTIL

## REPORT ON TECHNICAL AND PRATICAL TRAINING IN HOSPITALS IN TRINIDAD, BENI

Upon the basis of a diagnosis prepared on the current situation of how the Germán Busch and Materno Infantil (Mother and Child Care Hospital) hospital in the city of Trinidad are performing as institutions, a joint technical and practical training program was designed for the personnel of both hospitals, covering the areas of: (1) Hospital Management, (2) Medicines and Consumables Management, (3) Maintenance of Medical Equipment. The purpose was to raise the general level of the hospital's operation and management.

The training workshop was programmed in two stages, each one lasting for one week. The first workshop took place in the city of Santa Cruz, at the Hospital Universitario Japonés (Japanese Universitary Hospital) where theoretical and practical classes were thought, with the participation of all those who attended the course. Tasks were assigned to the students, so they would be able to apply them in their respective hospitals, on the guidelines they received. A one-week interval elapsed, before continuing with the second week of training in Trinidad, after an evaluation of the tasks' completion.

Previously to the second portion of the training that took place in Trinidad, a monitoring and follow –up of the tasks and responsibilities assigned during the first week in Santa Cruz.

The detail of all the activities that were covered is described below:

#### **Participants**

The participants were selected by the Director of each hospital, as follows:

#### Germán Busch Hospital

1.	Dra. Lucía Terrazas	Executive Director
2.	Dr. Edgar Villar Añez	Head, Internal Medicine
		Services
3.	Mr. Elías Vaca Cholima	Accounting Assistant
4.	Mrs. Luz Eliana Guzmán	Person in charge of Pharmacy
5.	Mr. Hedí Rodríguez Maitane	Person in charge of
		Maintenance

#### Hospital Materno Infantil

1.	Dr. Jorge Pinto Parada	Executive Director
2.	Dra. Maria Antonieta Costales	Head, Pediatrics Services
3.	Lic. Ramiro López Gómez	Administrative Director
4.	Sra. Michele Montenegro	Person in charge of Pharmacy

# 5. Sr. Fernando Atoyay

Person in charge of Maintenance

Annex A shows the list of subjects that were developed, and the schedule that was followed during the two weeks that the training course lasted.

It shall be noted that the training period was quite short to train non professional personnel in the areas of pharmacy and equipment maintenance.

#### 1. TRAINING ON HOSPITAL MANAGEMENT

# 1.1 Objective

The scope of the themes that were taught was designed with the objective of providing the participants tools and methodologies to raise the level of hospital management, through the timely decision taking process, taking into account the various aspects to be able to overcome the problems that hinder a fluid provision of medical and hospital services.

# 1.2 Managerial development of hospitals

Date: from July 8 to 13, 2002

# Participants:

Dra. Lucía Terrazas - Director, Hospital Germán Busch

Dr. Edgar Villar - Herad, Internal Medicine, Hospital Germán Busch

Sr. Elías Vaca Cholima – Accounting Assistant, Hospital Germán Busch

Dr. Jorge Pinto Parada – Director, Hospital Materno Infantil

Dra. Ma. Antonia Costales – Head, Pediatrics Services, Hospital Materno Infantil

Lic. Ramiro López – Administrator, Hospital Materno Infantil

# 1.3 Activities developed during the training shop.

The program was covered at about 95 % of what was expected, even some additional aspects were incorporated, which were not in the original program, however they were asked for by the participants, such is the case of Hospital Activity Control subject. The document that was presented, analyzed and delivered to participants is enclosed as an annex. The activities that were not developed due to the lack of time were the interviews with the persons in charge of personnel and social services. Notwithstanding, the possibility exists to have the person in charge of Personnel to travel to the city of Trinidad in order to provide an on the field training course, which would consist in the organization of a personnel office.

The theoretical and practical training activities were methodologically developed in the following manner:

Every morning, from 08:00 to 10:00 a.m., joint meetings were held for the presentation of managerial themes.

Sector meetings (managerial, maintenance and medicines) from 10:30 to 12:30 p.m. with visits to the various services of each hospital, along with the participation of the corresponding heads of department.

On afternoons, practical managerial training was imparted, covering aspects such as leadership, planning, budget preparation, follow- up and control.

On Saturday, a visit was made to each of the two health centers that are part of the service network of the Hospital, to observe the way how the reference and counter- reference systems work between health centers and hospital.

The Centro de Recuperación Nutricional was also visited. This center for nourishment recovery is functioning in the District V area.

The medicines and consumables administration model that District No. V uses were shown to the participants. The sustainability of the model called the attention of the participants, given it provides a guaranteed and permanent flow of medicines to the Health Centers that depend from the district. The low loss margin and small quantities of expired products that the system has (not more than 5%) was also noted as remarkable.

#### 1.4 Presentators:

The speakers that made presentations and facilitators were as follows:

Dr. Carlos Dabdoub, Executive Director, Hospital Universitario Japonés Dra. Eidy Roca, Head, Planning Dep.., Hospital Universitario Japonés Lic. Hugo Ribera, Administrative Director, Hospital Universitario Japonés

Dr. Freddy Romero, Medical Sub- director Hospital Universitario Japonés

Dr. Orlando Jordán, Head of External Consultation Dept., HUJ.

Dr. Freddy Gutiérrez, Head, Surgery Department, Hospital Univ. Japonés

Dr. Miguel Angel Chávez, Head, Gynecology and Obstetrics Dept. HUJ.

Dr. Héctor Solíz, Head of the Pediatrics Department, HUJ

Dr. Victor Hugo Zambrana, Head of the Teaching and Research Dept, HUJ

Dra. Jeanette Aguirre, PAHO/WHO Consultant on Health Services, HUJ

Dr. Carlos Alberto Suárez, Head, Internal Medicine Department, HUJ

#### 1.5 Final Evaluation

A final evaluation was carried out to find out the participants' perception both in the academic proficiency and the organizational aspects of the workshop. The results of this evaluation were as follows:

All participants identified the importance of the basic aspects of hospital management and stressed the planning, organization and control aspect of health activities along with those of leadership.

The aspects that called their attention as the most attractive were; Motivation, leadership, the building – up of the services quality, managerial principles applied in a hospital, preparation of a POA (Annual Operations Plan) and the importance of working as a team.

# 1.6 Aspects that have to be deepened in future training workshops:

Motivation, leadership, use of instruments for the economic and financial analysis of the hospital business, hospital management and administration, personnel management and social work, management of conflicts.

## 1.7 Other motivational aspects of the training workshop:

The leadership an aura of the facilitators, the identification of people from each hospital's staff with their own institution, the communication capabilities and motivation imparted by the hospital director and the way the facilitator team was well received.

# 1.8 Tasks to carry out after the training workshop ends:

A guide for carrying out the post- training tasks is attached to this report. These tasks will be subject of a follow –up activity.

The objective of these tasks is to develop a managerial discipline within the hospital's team, by means of the application of tools and support mechanisms such as the technical- administrative council, organization charts, agendas and elements for the preparation of an Annual Operations Plan for a Hospital.

# 2. POST-TRAINING EVALUATION CRITERIAFOR THE SANTA CRUZ DE LA SIERRA TRAINING PERIOD

# a. Background

Alter the evaluation took place at the end of the training workshop for the medical directive and administrative personnel from the German Busch and Materno Infantil Hospitals of the city of Trinidad, a list were prepared containing the tasks to be developed by the participants upon their return to their headquarters. Such lists are attached as an annex.

#### 2.2 Objective

The objective was to measure the proficiency level attained by the participants in the first phase of training in Santa Cruz de la Sierra. This was done thorough the application of operative instruments of hospital management.

#### 2.3 Criteria:

- i. **Planning.** Mission, Vision, Mission Formulation, Vision, Strengths and Weaknesses.
- ii. **Organization.** Review of the organization chart of the hospital. Preparation of a daily agenda.
- iii. **Direction.** Preparation of meetings for the technical- administrative council.
- iv. **Monitoring.** Monitoring of the production data of the hospital.

# 2.4 Methodology:

- Day 1. Review of task completion. Discussion with the Team about difficulties they may have met.:
- Day 2. During the morning, the group will work at the Materno Infantil Hospital, A meeting will be held with the Hospital Team to motivate personnel to carry our a current situation analysis, with an identification of the principal weaknesses and strengths, to start the formulation of strategic and operative plans.

During the afternoon, work will be done with the participants in the training program, to review the re-structuring proposal of the organization chart of the hospital and the conformation of support committees.

Day 3. During the morning the same activity carried out yesterday will be repeated in the Germán Busch Hospital and a presentation will be made on the subject of Managerial analysis of care quality in the Hospital.

In the afternoon, the manual of functions will be reviewed. The weaknesses will be reviewed and improved in the Strategic Plan progress document, and work will also be done for the elaboration of a managerial chart for the hospital.

#### 2.5 Expected results.

- i. The Team will have been able to identify the weaknesses of the current organization chart and will be able to propose a new functional structure.
- ii. The team will have started the formulation of a strategic plan.
- iii. The committees on Hospital Infections and Clinical Charts Audits will have been conformed and they would be already functioning.
- iv. A Technical Administrative Committee of the Hospital will be in standing in an adequate manner.
- v. A chart of hospital management indicators will have been elaborated.

#### 3. REPORT ON THE FOLLOW- UP DONE IN TRINIDAD.

Date: July 24-26, 2002.

Place: Trinidad.

# a. Background

Once the first phase of the training program carried out in Santa Cruz de la Sierra finished, the Team along with the participants decided to prepare a}n activity agenda with the tasks to be carried out when they get back to their respective working places. This would provide the participants the opportunity of an appropriate and practical application of the recently acquired knowledge.

# 3.2 Objective

To measure the level of proficiency of the first phases of the training workshop that tool place in Santa Cruz de la Sierra, through the application of operative instruments of hospital management.

## 3.3 Criteria

- i. Planning. Formulation of a Mission, Vision, Strengths and Weaknesses.
- ii. **Organization.** Review of the hospital organization chart. Elaboration of a daily agenda.
- iii. **Direction**. Preparation of a meeting of the technical- administrative council.
- iv. **Monitoring.** Monitoring of production data of the hospital.

## 3.4 Activities that were carried out

#### 3.4.1 Work Plan

According to the foreseen agenda, during the morning sessions the participants worked at the respective hospitals and on the afternoons with the training team, to evaluate progress, supplement concepts or elements that were not completely clear and to elaborate instruments for managerial work.

Day: July 24, Wednesday.

A visit was made to the JICA Team to exchange opinions with them on the activities to be developed.

- During the afternoon the participants worked in groups by hospital, to review the progress of recommended tasks compliance and also to analyze the degree of difficulty or easiness they found in carrying them out.
- Participation from both groups (Materno Infantil and Germán Busch Hospitals) was very active. About 89% of the commended activities were fulfilled.

Day: July 25, Thursday.

 Motivational Meeting: Work was done in a participative environment, with the presence of the Team; training was carried out both for the medical and technical- administrative personnel of the two hospitals. In total 43 persons participated in these activities. The subject of Hospital Management and the quality of care was presented and discussed. The purpose was to motivate the staff of both hospitals to the search of quality improvement, under the conditions of commitment, identification of the individual with his institution and team work. The Team judged that motivation was awakened, along with participation and the desire to integrate work groups to analyze and solve the problems that depend only on factors that pertain to each hospital alone.

- Work was carried out with the two hospital's groups to build the mission and vision of the hospital.
- The MISSION AND VISION proposals for both hospitals were elaborated in a participative manner. The director of each hospital was delegated to continue with the elaboration of each service that was discussed in the proposal prepared by the group.
- During the afternoon session, the proposals for organization charts that each hospital prepared were reviewed in detail. Some observations were made to both organization charts, such as: how to avoid duplicating the organization charts of other hospitals without taking into consideration the adequate necessities of their own hospital, to avoid the desegregation of efforts in too many departments through multiple services. This subject was dropped to discuss it again at the end of the week.
- The basic indicators of hospital management were also identified for each individual service and also for the directive levels of command: Director and Administrator. This activity ended on the last working day.

# Day: July 26, Friday:

- During the morning, a meeting was held with the medical, technical and administrative personnel of the Germán Busch Hospital to listen the lecture: Quality of care in a public hospital. An active discussion followed exchanging ideas about the problems that a hospital faces, emphasizing the need of a change in attitude by all stakeholders to cause the change towards improvement.
- In the afternoon, both hospitals' teams worked again on the methodology to elaborate al Annual Operative Plan, starting from the formulation of s Mission, a Vision and a SWOT analysis.
- The managerial chart of services was also finished, through the identification of the necessary indicators to do a follow- up of activities, both in the field of assistance and administrative areas. (A form is attached as an annex).
- The reviewed proposal for an organization chart for each hospital was also analyzed.

### **CONCLUSIONS:**

The theoretical and practical training workshop covered basic aspects of hospital management; however the need of incorporating the directions' support personnel to this process in an active manner was identified. Such is the case of the personnel, social services, statistics and administration staff, who have to get involved.

The basic steps for reorganizing both hospitals have been developed. These cover planning and the follow- up of medical care, however, a permanent follow –up is necessary along with appropriate counseling to solve doubts and problems that might appear in the course of the practical application of the process.

The response coming from the directors and service heads has been very positive, as it comes from all the components of the program.

#### IMPACT:

It is difficult to measure the impact alter only two weeks from the training course, however, the Team response, the changes that have been adopted in the hospitals, such as the conformation of a technical council, the creation of quality committees an other committees, the change of structures in the hospitals starting out from the formulation of a new organization chart, the beginning of the Annual Operative Plan formulation, and the elaboration of managerial follow –up charts for the hospitals operation, are some of the immediate results.

#### RECOMMENDATIONS.

- A continuing training program should be elaborated covering the aspects on which work has been carried out given that during the interaction with the Team weaknesses are identified, both in the fields of organization and the personnel build-up.
- Efforts should be made in the sense of incorporating the administration, social service, personnel and statistics staff, to the training scheme in a formal manner; those who in this occasion participated in all the activities that were carried out.
- To address at all levels the threat of the instability of working posts due reasons such as political changes, and to guarantee the permanency of the team that was part of the training course.
- To support both hospitals in the acquisition of materials and basic equipment for the fulfillment of the assistance function.
- To define the roll placed by both hospitals in the services network, thorough the assignation of a given number of population to cover with services, taking into considerations that these hospitals receive patients both from the city of Trinidad and also from the rest of the department.
- To provide both hospitals with an adequate capacity and authority of deciding the level of services that the hospital would provide, preventing in this manner the under- utilization of resources and inefficiency of actions.

- To prevent the contracting of empiric personnel or people without specialized education and experience both in administrative and technical areas that provide support to the Hospital direction.

#### 4. TRAINING ON MEDICINE AND CONSUMABLES MANAGEMENT

# a. Objective

- To classify and select medicines according to prevalent pathologies.
- To prepare procedures manuals for the purchase and distribution of medicines and hospital consumables.

The training course work was divided in three parts: a) pharmacy administration, b) administration of hospital consumables, c) administration of the Basic Health Insurance.

# b. Pharmacy Administration

Training was started at the Hospital Universitario Japonés in the city of Santa Cruz, where:

- Organization concepts were reviewed on what an institutional pharmacy should be, stressing the importance of the selection, distribution, dispensation and historic consumption of medicines.
- As a supplementary and support activity, the pharmacy at the Hospital Universitario Japonés was visited, to demonstrate to the participants, the hospital organization used there and a rational use of medicines and timely reposition through monitoring by means of stock cards (card index).
- Assignation and monitoring of emergency medicine chests.

# i. Administration of hospital consumables

- Procedures were indicated for the purchase, storage and distribution of medical consumables.
- Design of procedures, according to Basic Standards for the Administration of Assets and Services SAFCO Law. (Normas Básicas de Administración de Bienes y Servicios Ley SAFCO).
- Warehouse organization, in-coming and out-going products. Control of stocks, criteria for stock replenishing.
- Product classification for the purchase requisition (specific consumption request from a department and/or service, warehouse request for consumable products for various services).
- Elaboration of reports on the monthly operation of the warehouse, for accounting purposes.

# ii. Administration of the Basic Health Insurance

- General rules were instructed on the monitoring and use of the established forms for the S.B.S. beneficiaries.
- Monitoring of medicine stocks for the S.B.S. clients.
- Timely presentation of CAPO to the Municipality for the payment of monthly fees.

## c. Assigned Tasks

To elaborate a daily activity agenda, for aspects such as:

- Medicine replenishment for the pharmacy and emergency medicine chests.
- Elaboration de of the card index for the monitoring of stocks.
- To organize medicines following the national therapeutic vademecum.
- To deposit money collected from the sale of medicines with the general cashier.
- To prepare an estimate of the monthly consumption of existing medicines.
- Elaborate a basic list of medicines.
- Increase the medicine stock, according to clinical specialties.

# d. Evaluation of the post- training work

# i. Hospital Materno Infantil

All assigned tasks were fulfilled, in a clear demonstration of the eagerness to improve the dispensation conditions and facilitation of monitoring and control mechanisms.

#### ii. Goals Attained

- A Purchase Committee was conformed, integrated by the Director, Administrator, Person in Charge of the Pharmacy and one of the Medical Heads.
- Provision of medicines for every 24- hour period (the previous procedure was to hand in a complete package according to the S.B.S. coverage).
- Charges for medicines will be directly collected at the general cashier's booth.
- Emergency medicine chests have been prepared, for pediatrics and gynecology; these are daily replenished through prescriptions.

## iii. Germán Busch Hospital

- The daily agenda was not elaborated.
- Money collection is still done at the pharmacy
- The basic list of existing stock medicines has not been elaborated.
- The Purchasing Committee has not been conformed.
- Not all the assigned tasks were carried out; this is interpreted as low interest in the improvement of current conditions.

#### iv. Recommendations

- To provide more support from the medical and administrative professional personnel.
- To apply the use of prescription forms for the medicine dispatch (they are not currently used).
- Every prescription should be signed by the physician in charge of treatment.
- No medicine should be dispatched without a medical written prescription.
- To improve the coordination level between the Direction, the medical portion and the administrative sector with the pharmacy. The pharmacy carries 30 groups of medicines, ands 227 types of medicines that have no movement due to the lack of medical prescription.

# v. Goals Attained None.

# 5. MEDICAL EQUIPMENT MANINTENANCE

# 5.1 Background

During the observation period and when information was being compiled at the two hospitals in Trinidad (Germán Busch and Materno Infantil), an evaluation was made to record the type of equipment and main needs each institutions has. These were the basis for the programming of the scope of the training course, that was prepared in such a way that the personnel in charge of this important service gets acquainted with the type of existing equipment in each hospital.

The training program was carried out in two weeks, the first one took place at the Hospital Universitario Japonés, in the city de Santa Cruz, where theoretical and practical classes were taught, and the various sections of the hospital were visited for practical demonstrations of the use of each piece of equipment. The collaboration and support of the Hospital Japonés technicians was invaluable, given they acted as presentators in the areas of electricity, sterilization and air conditioning.

The development of this training course from July 8 to 13 was carried out completing the entire work program that had been designed for this purpose.

The course was initiated with an outline of the electric systems that act as drivers for medical equipment. Another important subject was the use of emergency electricity generators and their distribution.

The sterilization equipment and its functioning were in charge of the specialized personnel of Hospital Universitario Japonés. They developed a practical seminary on operation and maintenance through their different stages, such as cleaning, incrustation of solids in the steam generators due to the solids in suspension of the water, adjustment of automatic devices, and periodic change of parts by spares, causes and solutions to problems likely to occur during the equipment operation.

A maintenance sequence was developed for the maintenance of chirurgic illuminating lamps for operation rooms, because due to the lack of spare parts, similar lamps are used, however these partial solutions cause a deformation of the luminous spectrum. Through the utilization of some technical publications, demonstrations were made on how to recognize the luminous capacity rating, how to center a light beam, bringing together several lamps to get a centered beam and illuminated area.

Monitors and ventilation: Within the concept of a monitor's operation, an explanation was made but unfortunately it was not possible to demonstrate the practical way of adjusting a monitor due to the lack of adjustment simulators. The concept of modern equipment was developed as a concept,

taking into account the displays and de use of digital system characteristics for the detection an amplification of signals.

Ventilation of anesthesia application. A system was demonstrated to detect gas leaks for fresh gas and driver gases at the fittings and regulation for a good operation. Moreover, the diagram developed, shows the flow of gases to the patient. It was not possible to carry out a gas calibration due to the lack of a calibrating instrument.

Functioning mode with circuit valves and Peep Valves (positive end expiratory pressure), (suction) the various ways of using this service were demonstrated, such as the trans- operatory, new born, gastro- enterology, intermittent – pleural and for liposuction; moreover, the unit sources or transportation and central wall.

Incubators in neo- natology. An INSOLETTE C86 model incubator was used for the demonstration of this type of units.

The maintenance of this equipment was reviewed and the adjustment of its heating module, electronic safety devices for temperature control and the functioning of a servo- control were also seen.

Monitoring of the newborn, maintenance of the equipment, review of its operation and demonstration of cable connections to the patient.

During this process, the absence of the professional technical personnel was noted, the situation was more critical in the case of the Germán Busch Hospital's staff, a lack of sincere interest by part of the participants could be observed.

Within the follow- up stage, theoretic and practical demonstrations were carried out to show how to maintain various units and equipment; however a very elementary level was taken into consideration, preventing a deeper technical application.

As an important part for the preventive management of equipment, an alternative was offered, and that is to carry out a maintenance protocol.

BIBLIOGRAPHY: Technical information was taken from the following sources, to prepare this summary:

TECME SA.

**ISOLETTE SYSTEM** 

DAI-ICHI SHOMEI CO LTDA.

ORVOSI MUSZER OMSZOV

SAKURA

Theoretical and practical training workshop in the "Germán Busch" and "Materno Infantil" Hospitals, in the city of Trinidad

Using the evaluation carried out after the training course in Santa Cruz as a starting point, the need to strengthen the following aspects that were

developed in a practical way in all their characteristics was determined, according to the following detail:

### Operating Room.

Checking and maintenance of illumination lamps (surgical D.K.K. lamps), satellite type. Several bulbs were burned off, due to unbalanced charges, different from the charges specified by the manufacturer. The cause was explained to the participants and the condition was corrected.

#### Maintenance of the E.C.G. Monitor.

The unit had malfunctions in the connector cables that go to the patient. The electrode collector was thoroughly cleaned and the monitor cables were checked for integrity. Operation was demonstrated along with some likely problems and how to troubleshoot them. For example: interference, gain, accumulator failure and grounding.

Commissioning of a de- fibrillator monitor with charge and discharge tests, grounding, cables and connectors.

## Test of a Valleylab electro-scalpel.

Checking of the alarms in the dispersion plate, use of the hand and pedal commands, probable failure of these commands, how to do the periodical maintenance on this type of equipment.

# Check of the room supply of gases: Oxygen and vacuum.

Care in the change of parts by spares, such as collecting flasks and pressure gauges.

#### Laboratory.

Checking of the parts of a cito-hemathologic microscope, use of appropriate tools for servicing this equipment.

# Periodical inspections for checking centrifugal machines, both macro and micro.

Use of appropriate tools for this particular service.

Care and maintenance of a spectrophotometer unit.

## X Rays Machines-

Radiation tests; functioning of a cathodic tube in its various stages: long and short focusing.

Preparation and filling in of preventive maintenance sheets and "under repair".

#### Conclusions.

The lack of adequate instruments and tools and the short time given to this matter, became important limiting factors that prevented the fulfillment of the participant's expectations. Previous reports mention the little professional attitude shown by participants, making it necessary to dedicate a longer period to training sessions in this field.

Notwithstanding, the team considers that the basic objectives have been attained on a program that allowed the participants to work using the existing equipment.

### Recommendation.

Taking into consideration that this first training course has projections for the future, and considering that the hospitals still requires equipment, tools and appropriate instruments to be able to perform the functions they have been assigned to work on, the Team recommends emphasizing the formation of personnel in charge of these matters, in both hospitals.

# GUIDE FOR THE ANALYSIS OF DEPARTMENTS, SERVICES OR CARE UNITS

# Objective

To propose a methodological and simple tool for the global and participative analysis of a department, service or care unit of the Hospital, taking into consideration the different aspects of service management. The tool should facilitate the decision taking process for timely and adequate decisions to overcome the problems that limit the proper provision of services.

#### Criteria

The management of a health service has to do with the various aspects related to the organization structure, human resources, the organization of medical services, production of services, infrastructure and equipment, administrative procedures for the provision of consumables and materials, the conditions of reception and the quality of care given to patients and relatives, and also the relationship with other services and with other peripheral health centers (network of services).

Mission of the Service: (Describe the service and the participation of the personnel of the corresponding service, the mission of the service

within the structure of the nospital.)		
1. Organizational Structure.		
Organizational Structure (Description of current situation)	Improvement proposal:	
Formal Organization Chart		
Formal Dependency:		
Current Dependency: Communication Flow:		
Communication Flow.		
Information flow:		
information now.		
Horizontal coordination:		

Linear Coordination:	:				
Coordination with th	e service net	work:			
2. Human resource	!S.				
List of Physicians	Specialty	Working ho	ours assigned	to service.	
		Hospital (Hs./Day)	External Consult (Hs./Day)	Performanc e Cons/day	
Needs for training, u health – quality, etc.)	j			ical – manag	erial – public
According to the (mention each Area)	type of pe	ersonnel Pro	posal:		
Training, up- dating:					
Research:					
3. Organization o	f medical care	е.			
Description of cul	rrent conditi	on and Pro	posal of inte	rvention	
Attention schedule. Shifts:					
Organization of the charge of the shift, roo		rsons in			
Manual of Functions:					
Procedures Manual:					
Care provision norms:					

Norms for patient follow- up:	
Committees:	
Flow chart of care and procedures:	
	ability, condition, cleanliness, comfort)
Description and weaknesses	Proposals of intervention
Waiting rooms, reception room, orientation consultation rooms, internation rooms privacy, connection with support services diagnosis and treatment, basic utilities (electricity, water (cold and hot), telephone)	
5. Norms and administrative procedure	
•	
Description and weaknesses:  Requisition of consumables and materials: (management, knowledge and fast or slow processing of the requisition)	Proposals of intervention:
Description and weaknesses:  Requisition of consumables and materials: (management, knowledge and fast or slow	Proposals of intervention:
Description and weaknesses:  Requisition of consumables and materials: (management, knowledge and fast or slow processing of the requisition)  Provision of consumables and materials:	Proposals of intervention:
Description and weaknesses:  Requisition of consumables and materials: (management, knowledge and fast or slow processing of the requisition)	Proposals of intervention:  ials:  Proposal of intervention

# Equipment maintenance, infrastructure, etc. (Type of problem)

Main difficulties	Proposal of intervention.

# **6. Establishing relationships and coordination**. (Analyze the opportunity, origin

With other services in the hospital	With the peripheral health centers
(Opportunity and motives for coordination)	(Opportunity, origin of the reference, weaknesses in the quality of reference from Health Centers.)
Proposal of improvement:	Proposal of improvement:

# 7. Production of services. (Analysis of the corresponding period: YEAR, QUARTER OR MONTH

Activity	Indicator	Formula	Value
Check-outs	% of medical discharges	No. medical discharges	
		total check-outs	
	% of requested discharges	No. of requested discharges	
		Total check-outs	
	Hospital Mortality.	No. deceased.	
		Total incoming patients	
New consultations			
Follow -up Consultations	Index of follow-up consultations	Follow-up consultations	
		New Consults	
Referral	No. referred		

	patients		
Counter-reference (%)	Index of counter - references	No. C/R	
		Total Ref.	
Bed availability	Occupation percentage		
Average stay	Stay in days		
Economic Productivity	% of income for sale of services.	Amount generated by service	
		Total generated by all services	
Socioeconomic categorization.	Proportion according to socioeconomic category.	No. pat.Cat.A	
		Total patients	
		No. pat. Cat.B	
		Total Patients	
		No. pat. Cat.B	
		Total Patients	

**8.** Reception of services: Mail boxes, quality committees, humanization, information provided to patients and relatives, attention of claims, waiting time, satisfaction at check- out time surveys.

Description y deficiencies	Proposals of intervention	

# CONTROL

Describe the activity carried out	Proposal
Supervision: (From the Head of the	
service to personnel and from executive	
authorities to the service, frequency,	
instruments y minutes)	
Monitoring: (CAI of Service, frequency,	
instruments y minutes)	
,	
Evaluation: (Quarterly, semi-annual or	
annual; internal or global, Report?)	
Evaluation of POA for 2002. (Existent,	
follow- up, instruments, report)	
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2.2
2.3
2.4
2.5
3. In what fields do you consider that the heads of service need training or refresher courses?
3.1
3.2
3.3
3.4
3.5
4. How is evaluation of the personnel's performance carried out within the various services? 4.1
4.2
5. Which are the services that present more difficulties in their functioning? Give details in your answer.
5.1
5.2
5.3
5.4
5.5
Other comments:

# GUIDE FOR INTERVIEWING HEADS OF DEPARTMENTS AND SERVICES

DE NA PE	OSPITALSERVICESERVICE AME OF INTERVIEWED ERSONPOSITION
DΑ	ATE
2. 3.	How long have you been working in this capacity?  Modality on how you obtained the job  What are the main problems that the service finds?
3.5	
5.	Do you believe that some of the problems are caused by the lack of training or knowledge both of the medical personnel and nurses or any other?  If your answer is positive, could you point out some of these problems?
6.	In what areas would personnel need to receive training?
Ì	

7.	If you would have to participate in a training course to improve your services, what aspects would you like to see included in the training course?
•••••	
	Do you know what the percentage of occupation of your service is?
9.	Do you know what the average performance of external consultation in the Hospital is? (Consultations/hour/physician).
10	.Other
COI	mments:
D/	AILY WORKSHOP DEVELOPMENT EVALUATION
	y
	ea of work: Medical Managerial ( ) Maintenance ( ) Pharmacy ( )  Administrative Managerial ( )
	ase write down the outstanding aspects of the workshop and those that called your attention ing the day:

POSITIVE ASPECTS	
ACADEMIC	LOGISTIC (Organization of the workshop)
NEGATIVE ASPECTS:	
ACADEMIC	LOGISTIC (Organization of the workshop)
SUGGESTIONS:	
Thank you!	

# JAPAN INTERNATIONAL COOPERATION AGENCY

# PREFECTURE OF BENI DEPARTMENT GOVERNMENT OF THE REPUBLIC OF BOLIVIA

# STUDY ON ENHANCEMENT OF DISTRICT HEALTH SYSTEM FOR BENI PREFECTURE

# FINAL REPORT DIAGNOSIS OF HOSPITALS

# HOSPITAL PRESIDENTE GERMAN BUSCH HOSPITAL MATERNO INFANTIL Dr. JESUS VARGAS

NOVEMBER 2002

# **FINAL REPORT**

With the objective to improve the management of the Germán Busch and Materno Infantil (Mother and Child) Dr. Jesús Vargas Hospitals of the city of Trinidad, a training program was developed to provide instruction and technical training to the personnel in the areas of (1) Hospital Management, (2) Medical Equipment Operation and Maintenance, and (3) Medicines and Consumables (Inputs) Management.

Even though each hospital shows its own characteristics in regard to its physical infrastructure and hospital equipment, and the type of patients each hospital receives and gives care to are quite different, it was possible to detect common problems in the indicated areas. These problems were detected during the performance of the training program and instruction workshop, and in the subsequent follow up process.

When the first two weeks of training ended, one spent in the city of Santa Cruz and the other in the city of Trinidad, the consulting team continued providing its counseling and giving work guidelines during the follow up stage, as a way to facilitate the monitoring of activities and to carry out a final evaluation of the training program.

# 1. HOSPITAL MANAGEMENT

#### I. OBJECTIVES

# (i) General Objective

To develop a training program for the managerial level personnel and to provide support to the two hospitals in Trinidad for the implementation of an Urban Health Model.

# (i) Specific Objectives

- Train the directors and heads of services of the hospitals, in the Hospital Management component.
- Provide the responsible personnel in the maintenance and pharmacy areas, with the adequate management of maintenance and pharmacy skills, adopting a management model for medicine and medical supplies management.

# II. Stages of the Training Program

- 1. Identification of the training needs of the managerial level personnel and other personnel involved in the Program.
- 2. Training at managerial level in the University Japanese Hospital in Santa Cruz.
- 3. Evaluation and follow up of what was learned and its practical application in the hospitals involved in the Program.
- 4. Evaluation of the program results.

# **INITIAL SITUATION**

The initial situation is summarized in the following chart:

# **Initial Situation Analysis**

German Busch Hospital	Materno Infantil Hospital
Planning and Organization of the Hospital	
No Annual Operations Plan (AOP) is prepared. Activities are executed as required according to need.	• A manual exists, it was prepared by an external consultant; however, it has not been applied to the hospital.
<ul> <li>An old organization chart is used, it is not divided in departments, and it has only two areas: Health care and support services (a model of this organization chart is shown as an Annex).</li> <li>It has a technical- administrative Board, where the Director, Administrator and service Heads participate.</li> <li>External consultation takes place only during the morning; there are no consultations for surgery. Some specialties such as urology, offer consultations only once a week.</li> <li>It has hospitalization services, both for medicine and surgery.</li> </ul>	<ul> <li>It does not possess any protocols for the management of pathologies.</li> <li>It does not have a committee for auditing the clinical records, and no analysis of clinical cases is carried out.</li> </ul>
<ul> <li>Personnel show a high degree of lack of motivation; staff feels skeptical about the possibility of improvement.</li> </ul>	• It has an infections committee which requires up- dating and normalization.
Too many labor type conflicts.	<ul> <li>There is no quality of care committee.</li> <li>It possesses a voluntary support teams which will implement a quality improvement program.</li> </ul>
Manuals of Functions, Procedures and Health Care Flow Charts:	
<ul> <li>Non existent. A manual of functions from SEDES is being disseminated for internal review.</li> </ul>	

#### **Health Care Protocols:**

• Non existent in written form. Conventional norms are applied.

#### **Management of Clinical Records:**

 There is no follow up for the filling- in of clinical records, there are no rules for its use or provisions to derive them to statistics and file.

#### **Statistics:**

 SNIS is applied. The processing is done manually. Lack of basic means for processing, such as calculator and typewriter; not to speak about a computer, to enter SNIS input data into the National Health Information System.

#### **Committees:**

 The committee on hospital infections has been organized, although it is not functioning.

# Humanization of health care: Treatment, reception, information.

 No work has been done in this component. There is no vision of globalized health care provided to patients by the hospital's personnel.

#### **Supervision:**

 Visits coming from SEDES are eventually received.

Programmed supervision is non existent. There is no custom to supervise the internal services provided by the hospital.

#### **Monitoring**

 Not carried out. No CAI is carried out, nor meetings held to analyze the service indexes of the different services provided by the hospital.

#### **Evaluation**

Not carried out.

# • It eventually receives supervision from the Health Ministry and SEDES.

- There is no internal supervision of the services provided by the hospital.
- The pediatrics and gynecology services hold meetings to analyze the production of these services, although in a sporadic manner.

# Coordination with the network of services. Role of the hospital.

- Its functions are not defined within the network of services. It is the reference hospital in the Urban District of Trinidad. It also provides care to patients referred from the provinces of the Department. There is no formal relationship with the Health Centers of the District.
- Because of its characteristics on human resources and the tendency of the existing installed equipment and the equipment to be installed in the future (computerized assisted tomography), it works as a third level hospital; however, it still performs activities that correspond to First and Second Levels.

 The hospital receives referred cases from all over the city and provinces; however an established communications system does not exist.

# Administrative and Financial Control Mechanisms

#### **Budget**

• Not prepared. Expenses are paid for, as required by need and availability. (See financial analysis in the Annex).

#### **Control of Personnel:**

• A proper control system is inexistent. The physicians have no working hours schedule for the attention of external consultations, hospital checking-in and other activities such as teaching and scientific activities. A high index of incompatibility exists within the medical staff, however it has been approved bay the Medical Bar due to the lack of specialized physicians in the majority of specialties; for this reason it becomes very difficult to exert control on the physicians' work schedules.

# Definition of Fees Charging System: Categorization of Social Services

• No uniform categorization parameters are applied nor are all the indigent patients care cases recorded. This brings the indigence margin to very low values. The majority of cases referred from rural districts have no economic means to cover the expenses of their care.

#### **Boarding Services**

• The hospital possesses this service; however it has no rules for its operation.

- A basic budget is prepared, however it is not based on the identification of the needs of the services.
- It is carried out by means of the use of a notebook which is signed by each person at the time he or she arrives to the hospital., A control system in non existent, given the majority of physicians who work at the hospital have incompatible work schedules because they work in more than one institution. However, this situation is accepted by the Medical Bar.

A categorization system is non existent.
 The hospital provides service to Basic Health Insurance patients. For pathologies not covered by the BHI (Seguro Básico de Salud, SBS) it provides free service to a very high percentage of indigent patients (80%).

# **ACTIVITIES CARRIED OUT IN SANTA CRUZ:**

- Visit to the Hospital services.
- Interviews with the Heads of Departments and other services of the Hospital.
- Participation on the Technical Board (or Council) meetings, for the evaluation of the production indicators of the First Quarter.
- Conferences on managerial subjects, described in the program and corresponding reports.
- Training on pharmacy and medical supplies management.
- Training on the diagnosis, prevention, repair and maintenance of equipment.

# **DEVELOPMENT OF THE PROCESS:**

#### Stage I.

- Initial visit to the two hospitals of the Program in Trinidad.
- Interviews with the Directors of both hospitals, also interview with the heads of services and personnel of the administrative, pharmacy, and maintenance branches.
- Identification of the areas where strengthening is needed, detailed in a fill in form prepared for such objective.

## Stage II.

- Training course at the University Japanese Hospital in Santa Cruz de la Sierra.
- The contents and results are described in the Post Training report.
- Definition of tasks and commitments for the follow- up of the course.

# Stage III.

Monitoring of the fulfillment or completion of the projected activities in Trinidad. (See report on 2<sup>nd</sup> Monitoring).

Commitments and tasks for the final evaluation.

## **APPLIED METHODOLOGY**

- Expositive for conferences
- Demonstrative for the elaboration of working tools and management mechanisms: Technical Administrative Board (Council).
- Group work at both hospitals to prepare a Strategic and an Operative Plan.
- Programming and follow up of the application tasks in the corresponding work centers.

#### **Results Obtained**

# **Materno Infantil Hospital:**

- Motivation generated in the Directors, Heads of services and administrative Head about the need of seeking the transformation of their hospitals.
- Joint construction of work instruments: Planning Guides, programming, use of indicators on the management of services.
- Organization of the hospital management supporting committees: Technical – administrative committee, audit of clinical records committee, infections committee, etc. (Meeting Minutes).
- The basic elements for the elaboration of an Annual Operative Plan (AOP) are already present. (See Annex).

# **General Germán Busch Hospital**

- A high degree of motivation was observed on the participating team during the initial training period.
- The Team did not reach an optimum level of integration afterwards, due to several factors:
  - Lack of identification of personnel with the Hospital
  - A clear definition of the role of the hospital is inexistent
  - A committed support from the superior authorities is not observed, especially in the fields of supervision, control and follow-up of standards or norms, support of basic mechanisms such as the provision of the strictly necessary personnel for the attention of central functions.
  - Lack of definition in the designation of an administrator.
  - Personnel who are in charge of directive functions, do not have a sufficient background (specialized formation) to work on the positions they are currently occupying.
  - Employment instability
  - Lack of support to the Director of the Hospital, to help her in taking managerial decisions.
  - Influence of the Labor Union, weakens the authority of the Director.

These considerations were prepared for the previous preliminary report, prior to the training course, and were taken as factors of risk.

#### **Conclusions**

- The level of formation (education) both in the subjects of hospital management and maintenance and manipulation of medicine supplies, is elementary.
- An excellent level of motivation was attained among all persons involved among the personnel of both hospitals.
- The persons responsible for statistics services, personnel and social worker, were incorporated to the management of hospitals working team.
- The program that was carried out was relevant in regard to the needs expressed and detected by the Facilitator team.
- The Materno Infantil Hospital, has reacted very positively to the Program, motivation and a decision to attain improvement of the quality of care provided by the hospital, exist and can be perceived.
- Germán Busch Hospital requires a previous stage of work for the stabilization of personnel, and to prepare clear definitions in regard to the role that the hospital has to play as general hospital and as reference hospital.

- To guarantee the employment continuity in the team, for the personnel that participates in the Program.
- Design follow- up programs top guarantee the efficacy of the provided training.
- To make an effort to incorporate the persons in charge of Administration, Personnel, Social Work and Statistics in future training programs to strengthen the managerial level staff activities.
- Guarantee the active participation of the SEDES Team, Municipality, and Japanese Cooperation for the definition of a departmental policy for the definition of the role of each one of the hospitals on the health care system.
- Strengthen the managerial levels of the hospitals in order to let them attain the implementation of adequate managerial measures.
- Promote flexible training programs in a way to permit adjustments within the process before attaining the pre- established parameters set in the initial terms of reference.
- Facilitate the development of new training programs, designed as personalized units, to treat the problems of each service in particular, given the need for training are different for each hospital and each service.
- The Germán Busch Hospital problems are based on very elementary aspects of the hospital organization, they have more to do with the structure mechanisms, organization and personnel, which depend from the hierarchically higher levels.
- On the other hand, the Materno Infantil Hospital development demands managerial support based on processes development, rather than structure based.

NAME OF THE

Provinces

Other departments

# METHODOLOGICAL GUIDE FOR THE ELABORATION OF A STRATEGIC AND OPERATIVE PLAN FOR THE HOSPITAL

HOSPITA	<b>AL:</b>			
Year:				
	SIS OF THE SITU RAPHIC DATA	ATION OF THE I	MUNICIPALITY	
- Urba - Rura - Femi (For the Ministry Children Children Teenage Expected	Population: (According Population: Trirold Population: Proving Population: population by age of Public Health. less than 1 year: less than 2 years ers: from 10 to 19 dd Pregnancies: 4 dd Pregn	nidad: rinces: Ma e groups, use the Bor s: Chi years: Wo	sculine Population	vided by the 5 years:
Indicator	r Medicine	Surgery	Pediatrics	Gynecology- Obstetrics
No. of beds				
Occupancy				
No. of check-ins				
No. of check-outs	3			
Deceased				
Mortality rate				
Average stay				
No. of surgeries				
Characteristics		N64	.4.	D
Origin of the d	emanu:	No. of patier	its	Percentage
Capital City	l		1	

<b>COMMENTS:</b>		•••••	•••••	 
•••••	•••••	••••••	•••••	 •••••

Vision of the hospital:
Mission of the Hospital:
Institutional Objectives: Assistance:
Teaching: Training center:
Research:
Projection on the Community.
Projection on the Community:

No. of Supervision visits carried out

Other activities carried out:

# **EVALUATION OF THE PREVIOUS ADMINISTRATIVE PERIOD**

Analysis of the goals attained in the previous year administration:

# I. RESULTS OBTAINED. In accordance to the period's commitments.

INDICATORS	PROGRAMMED GOAL	VALUE ATTAINED
Assistance		
General consult inhabitants/year		
Follow up consult / New consult Index		
External consult performance		
Days worked / Workable days Index		
Average stay at the hospital		
% bed occupancy		
Performance of Operating Room (surgeries /		
day)		
Hospital mortality rate		
Before 48 hours		
After 48 hours		
Reproductive / Child Health		
Expected pregnancies		
Coverage of pre- birth control, before the		
5th. Month		
Coverage of the 4th Pre- birth control visit		
Coverage of institutional births		
EDA cases treated in children less than 5		
years.		
Pneumonia cases treatment in children less		
than 5 years, with care provided in service		
Coverage of DPT 3 pentavalent in children		
less than 1 year.		
Women that receive Family Planning		
Orientation		
Mother deaths		
Before 48 hours		
After 48 hours		
Death of new born children:		
Before 48 hours		
After 48 hours		
No. of references from Health Centers		
No. of counter- referrals to Health Centers		
Other indicators		
Other mulcators		
No. of CAI performed		
Training courses on program norms		
Training courses at managerial level		
(Directive personnel)		
No. of Supervisory visits received		

# MORBIDITY AND MORTALITY.

Main causes for consultation (5) **Source:** Hospital Records

Reason for consultation	No. of cases	Percentage
Other causes		
Totals:		

Main causes for	checking-	in at the	hospital:
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Reason / service	Medicine	Surgery	<b>Gineco-obstetrics</b>	<b>Pediatrics</b>
Other causes:				
Totals:				
i otais.				
omments:				
omments:				
	••••		• • • • • • • • • • • • • • • • • • • •	
lain causes for death	during service			
	during service Medicine	Surgery	Gineco-obstetrics	Pediatrics
		Surgery	Gineco-obstetrics	Pediatrics
		Surgery	Gineco-obstetrics	Pediatrics
		Surgery	Gineco-obstetrics	Pediatrics
		Surgery	Gineco-obstetrics	Pediatrics
		Surgery	Gineco-obstetrics	Pediatrics
Causes / service		Surgery	Gineco-obstetrics	Pediatrics
Causes / service Other causes		Surgery	Gineco-obstetrics	Pediatrics
Main causes for death Causes / service Other causes Totals:		Surgery	Gineco-obstetrics	Pediatrics
Causes / service Other causes		Surgery	Gineco-obstetrics	Pediatrics

# ANALYSIS OF STRENGTHS AND WEAKNESSES BY LINES OF ACTION

ANALYSIS AREA	STRENGTHS	WEAKNESSES	ALTERNATIVES
	(At hospital level)		FOR SOLUTION
Compliance of care			
provision goals. According			
to results attained by			
programs.			
Include Health Basic			
Insurance, Old Age			
Insurance and Indigenous			
People Insurance, if			
appropriate.			
mpp specific			
Infrastructure and			
equipment			
Rooms, special areas, bath			
rooms, waiting room for			
patients, living room for			
personnel			
F			
Equipment, materials and			
supplies			
(Compare with the			
Infrastructure and			
Equipment Guide of the			
Ministry of Health			
Trimingly of Flouring			
Internal organization			
Organization chart,			
Organization ands Functions			
manuals, Technical Councils			
or Boards CAI.			
Dissemination and			
application Of the Basic			
Insurance norms.			
Humanization of hospital			
care			
Treating of patients, privacy,			
confidentiality, doubts			
clarification, orientation and			
education about the patients'			
problem and treatment.			
Welcome and dignified	1		
treatment			
Quality of reception,			
cordiality. Information			
Cleanliness, comfort, bed			
linen, bath rooms.			
inicii, vaui ivviiis.			
Administration			
Aummstration			

AOP, Budget, Compliance		
of norms and procedures.		
Supply of materials and		
consumables.		
Personnel relationships		
between service and		
administrative staff.		
<b>Human Resources</b>		
Quantity and formation of		
existing personnel.		
Courses and training.		
Supervision and		
managements of personnel.		
Incentive system.		
Hospital Safety,		
occupational health		
Surveillance programs and		
environmental control,		
transmissible diseases		
prevention. Biosafety.		
Coordination with SEDES		
and Municipality		

# ANNUAL OPERATIVE PLANNING

# PROGRAMMING BY ACTION LINES

WHAT DO WE PROPOSE OURSELVES TO ATTAIN FOR NEXT YEAR? (In regard to rendering of services, users' and workers' satisfaction). Planning is done according to the previously analyzed lines of action, taking the rendering of a service as a basis and the activities that support such service.

# I. HEALTH CARE, BY PROGRAMS. (Rendering of services.)

Activity to carry out (According to the indicators established in the commitment for the year)	Goal attained (The values recorded in the previous year evaluation are copied here).	New Proposed Goal
General Consult, inhabitants/year		
Follow up consult / New consult		
Index		
External consult performance		
Days worked / workable days Index		
Average stay at the hospital		
% bed occupancy		
Performance of Operating Room		
(surgeries / day)		
Hospital mortality rate		
Before 48 hours		
After 48 hours		
Reproductive / Child Health		
Expected pregnancies		
Coverage of pre- birth control,		
before the 5th. Month		
Coverage of the 4th Pre- birth		
control visit		
Coverage of institutional births		
EDA cases treated in children less		
than 5 years.		
Pneumonia cases treatment in		
children less than 5 years, with care		
provided in service		
Coverage of DPT 3 pentavalent in		
children less than 1 year.		
Women that receive Family		
Planning Orientation		
Mother deaths		
Before 48 hours		
After 48 hours		

Death of new born children:	
Before 48 hours	
After 48 hours	
No. of references from Health	
Centers	
No. of counter- referrals to Health	
Centers	
Other indicators	
N. CCAI. C. I	
No. of CAI performed	
Training courses on program norms	

# PROGRAMMING OF ACTIVITIES TO SUPPORT THE RENDERING OF SERVICES.

Line of action	Activity	Date	Cost	Responsible person	Financing Source
TRAINING				Person	300200
(Workshops, seminars)					
(					
EDUCATION AND					
PROMOTION					
(Community activities, fairs,					
etc.)					
HUMANIZATION AND					
QUALITY OF CARE					
(Quality committee,					
suggestion boxes. permanent					
surveys, etc.)					
INFRASTRUCTURE,					
EQUIPMENT AND					
FURNITURE.					
(Remodeling, broadening,					
constructions)					
(Take into account the					
humanization and quality					
criteria)					
ORGANIZATION AND					
ADMINISTRATION					
(Implementation of					
managerial systems,					
personnel organization chart,					
accounting, budgets, etc.)					
EPIDEMIOLOGY					
SURVEILLANCE					
Biosafety					
MONITORING,					
EVALUATION AND					
CONTROL OF AOP					
(CAI, Supervision,					
evaluations)					
COORDINATION WITH					
MUNICIPALITY AND					
SEDES.					

# 1. TIME CHART FOR THE EXECUTION OF ACTIVITIES

(Example)

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
												<u> </u>
												<u> </u>
												<u> </u>
												<u> </u>
												<u> </u>
												<u> </u>
												<u> </u>
												<u> </u>

**BUDGET:** A matrix for the Programming of Operations is included as an annex.

Place and date of the finalization of the AOP:

Signature: Director of the Hospital Signature: Administrator

# SPREADSHEET TO CARRY OUT THE FOLLOW-UP OF THE ANNUAL OPERATIVE PLAN ACTIVITIES

Line of action	Activity	Date			Cost			Responsib le Person	Financing Source			% of Completion (Quarterly)				
		Prog	Exec	ureo	Prog ram	Exec	uted		Prog	,	Exec	1°	2°	3°	4º	
TRAINING AND CONTINUING	1. Courses 2. Workshops			-												
EDUCATION (Workshops, seminars, in service - learning)	3. Seminars															
in service - learning)	4.															
	5.															
EDUCATION AND PROMOTION	Fairs															
(Communitarian activities. fairs, etc.)	Campaigns															
HUMANIZATION	Committee															
AND QUALITY OF CARE	Conf. Suggestions box															
(Quality committee, suggestion boxes,	Quality surveys															
permanent surveys, etc.)																
INFRASTRUCTURE, EQUIPMENT AND	Construction															
FURNITURE. (Remodeling,	Remodeling Broadening															
broadening, constructions)	Maintenance															
(Take into account the quality and humanization criteria)	Equipment List Elaboration															
numanization criteria)	Purchase of Equipment															
ORGANIZATION Y ADMINISTRATION	Organization chart review															
(Implementation of managerial systems, organization, chart,	Manual of Functions review															
personnel organization, accounting, budget, etc.)	Norms and procedures for care provision review															
	Personnel organization			T						Ì						
	Administrative procedures review															

SURVEILLANCE OF ENVIRONMENT (Fumigation campaigns, spraying, communitarian work, etc.)	Campaigns  Communitarian Activities					
MONITORING, EVALUATION AND CONTROL OF AOP	CAI Meetings					
(CAI, Supervision,	Evaluation workshops					
evaluations)	Supervision					
COORDINATION AND SOCIAL	COMUSA meeting					
PARTICIPATION. (COMUSA Meetings,	EDA					
participation in EDAs, SUMMITS, etc.	SUMMIT					
Senants, etc.	Other					

# FOLLOW- UP OF ACTIVITIES IN RENDERING OF SERVICES AND EXECUTION OF PROGRAMS.

The follow- up of programmed activities in the line of action of Medical Care is carried out by means of the CAI meetings, using also the programmed goals as a basis. The degree of completion is analyzed, along with the facilitating factor or the limiting factors for the attainment of the results already reached and new correction actions are proposed.

already reached and new correction act	ions are proposed	•							
Activity to be carried out (According to indicators established	Programmed Annual Goal	% of Completion (Quarterly)							
in the commitment for the year)		1°	2.	3.	4.	% Executed (Annual)			
General Consult, inhabitants/year									
Expected pregnancies									
Coverage of pre- birth control,									
before the 5th. Month									
Coverage of the 4th Pre- birth									
control visit									
Coverage of institutional births									
EDA cases treated in children less									
than 5 years.									
Pneumonia cases treatment in									
children less than 5 years, with care									
provided in service									
Coverage of DPT 3 pentavalent in									
children less than 1 year.									
Women that receive Family									
Planning Orientation									
Mother deaths									
Before 48 hours									
After 48 hours									
Reception of TBP BK positive cases									
Cure of positive TBP cases									
No. of referrals to other service									
No. of counter- referrals									

<b>Reasons for NON COM</b>	PLETION OF ACTIVITIES.	

# FOLLOW- UP OF ACTIVITIES IN RENDERING OF SERVICES AND EXECUTION OF PROGRAMS.

The follow- up of programmed activities in the Medical care line of action is carried out through the CAI meetings, also taking the programmed goals as a basis. The degree of completion is analyzed, the facilitating or limiting factors for the attainment of the reached results, and new correction actions are proposed.

Activity to be carried out (According to indictors established	D	% of Completion (Quarterly)							
in the commitment for the year)	Programmed Annual Goal	1°	2.	3.	4.	% Executed (Annual)			
General Consult, inhabitants/year									
Expected pregnancies									
Coverage of pre- birth control, before the 5th. Month									
Coverage of the 4th Pre- birth control visit									
Coverage of institutional births									
EDA cases treated in children less than 5 years.									
Pneumonia cases treatment in children less than 5 years, with care provided in service									
Coverage of DPT 3 pentavalent in children less than 1 year.									
Women that receive Family Planning Orientation									
Mother deaths Before 48 hours After 48 hours									
Reception of TBP BK positive cases									
Cure of positive TBP cases									
No. of referrals to other service									
No. of counter referrals									

]	Reasons for NON COMPLETION OF ACTIVITIES.
L	

# 2. MANAGEMENT OF MEDICINES AND INPUTS

During the analysis of situation period, deficiencies were detected. These deficiencies were taken into account for the preparation of the training program scope in the areas of Pharmacy and Management of Inputs. After the training course took place, orientation guides were distributed, to disseminate and implant recommendations for the improvement of the managements and provision system, within the organization, administrative and technical frameworks and in compliance of legal provisions in standing (Safco Law).

#### 2.1 GERMAN BUSCH HOSPITAL

#### 2.1.1 MANAGEMENT OF MEDICINES

# Organization

The institutional pharmacy has been organized according to the standards required by the Ministry of Health and Social Provision; that includes:

- Codification of medicines upon the basis of the technical norms established in the National Therapeutic Listing.
- Selection and grouping of medicines elaborated upon the basis of pathologies, using the generic name.
- Elaboration of a basic list of the existing medicines in the pharmacy, for the knowledge of physicians and to have a better rotation of medicines.

# **Administration**

- Elaboration of the physical valued inventory card file
- Control of monthly inventories
- Control of expiration dates of medicines
- Collection of money coming from the sale of medicines is done through the Central Cashier

#### Technical

- It has been established that the pharmacy personnel should be the responsible persons in charge of managing the medicines and the rational use of them. They also should dispatch the prescriptions that come with commercial names, expending them by the generic name.
- Administration personnel should be notified about the medicines that are about to expire, for a possible switch and also the physicians should be reminded that there are products in the pharmacy close to their expiration date.
- Emergency medicine chests should be established in the area of the most frequently used services, and the reposition of medicines should be done daily
- The advisor team insisted on the conformation of the pharmacologic therapeutic committee and the medicine acquisitions committee, with the objective of involving the head physician in a way that he would have to

take into account what types of medicines are available in the pharmacy, and which should have a faster rotation.

#### **RECOMMENDATIONS**

- To employ professional personnel (Pharmacist)
- To guarantee employment stability.
- Training of personnel.
- Elaboration of a Functions Manual.
- Elaboration of a Procedures Manual.
- Purchase medicines with generic name.
- Forbid the acquisition of medicines under commercial names and those of popular consumption (free sale products; that do not require a physician's prescription).
- Create the pharmacologic therapeutic and purchases committees.
- Create the Emergency Medicine Chests.
- Signaling models of the location of places, for a better care of users.
- Extend the working hours to provide services if possible until 12:00 P.M. (3 shifts) and cover 24 hours of service using emergency medicine chests.
- Coordinate meetings with the direction, administration and the person in charge of the pharmacy, to verify the rotation of medicines.
- Establish mechanisms of supervision and periodical controls by part of the Administration and Direction of the Hospital.
- Provide a refrigerator for products that require cold storage.
- Provide a computer for the recording and control of the pharmacy's operations.
- Prepare monthly written reports to the Director of the Hospital for an analysis along with the heads of services.

#### **ACCOMPLISHMENTS**

- Elaboration of a Basic Listing
- Increase of collected funds (sale of medicines)
- Maintain an updated control of medicines through the physical and valued inventory card file.

# 2.1.2 MANAGEMENT OF SUPPLIES (CONSUMABLES)

The purchase of supplies (consumables) is carried out through the administration of the hospital according to needs and availability of economic resources. There is no acquisition programming or historic consumption is taken into consideration, because no records are kept to account for the monthly activity or movement of the warehouse.

Products are entered in the general warehouse, where the quantities are recorded in cards. However these are not up-dated and show differences from previous years, in such a manner that there is no effective inventory control.

Supplies are stored without applying any selection criteria, such as the type of product; they are simply left there. The products go out of the warehouse through an internal requisition which is authorized by the administration.

The warehouse manages only basic supplies in small quantities. Most of those are cleaning materials and very few medical supplies, because the scarce economic resources limit the possibility to purchase larger quantities.

The hospital does not have an Acquisitions Committee, as established in the Basic Norms for the Administration of Goods and Services, or the Reception Committee.

#### **Human Resources**

The warehouse has two employees who are not familiarized with organization and management of supplies. They have no knowledge of ways of costing products or administrative procedures; in other words they have no experience. They are new personnel; this reflects the scarce stability of employees in their work posts.

- Contract personnel who have a profile in accordance to the post and functions to be developed.
- Elaboration of a Manual of Functions.
- Elaboration of a Manual of Procedures.
- Training for the position (manual of functions) and ways of costing the products.
- Offer stability of employment.
- Elaborate and report to the administration the monthly movement of materials and supplies, for timely recording and accounting.
- Facilitate means and conditions for the storage of products; also provide a computer for a better warehouse control.
- Create forms for the requisition of materials, remittance notes and purchase forms.
- Create the Acquisitions Committee.
- Carry out the physical valuated inventory and settle the existing differences in the card index to make a fresh start with new records.
- Report every month the movement of materials and supplies of the warehouse, sending a report to the administration for accounting purposes.

# 2.2 HOSPITAL MATERNO INFANTIL

#### 2.2.1 MANAGEMENT OF MEDICINES

The objective – population of the Mother and Child Hospital (Materno Infantil) is the mother and child of less than five years of age, within the norms and regulations of the Basic Health Insurance (Seguro Básico de Salud, SBS), whose medicines are defined for each medical care consultation upon the basis of essential and generic medicines.

However, the management of medicines in regard to supply, control and dispensation has been the subject of detailed analysis with the end of organizing a pharmacy in such a way that the medicines could be controlled and a follow up could be applied, under the norms of SBS.

It should be noted that the hospital, not only works with the SBS patients, it also renders other medical services to non insurance patients, which also demands the dispensation of medicines.

#### Administration

- Medicines have been selected and codified.
- Currently, medicines are controlled through a card file.
- Inventories are taken monthly, semi annually and annually.
- Inventories are recorded both by units and by cost (physical valued).
- Control of expiration dates.
- Collection of money through the Central Cashier
- The medicine dispatch form the rotating fund is done through a voucher issued by the central cashier.
- Money collection has increased since the month of June.

# **Technical aspects**

- The pharmacologic therapeutic committee has been conformed.
- The acquisitions committee has been organized.
- The prescriptions issued within the hospital use the generic names of medicines and are dispensed by the pharmacy.
- The use of emergency medicine chests has generated the provision of a better service to users.
- In the medical offices, the physicians have a basic list of medicines that lets them have a good knowledge about the medicines that exist in the pharmacy stock. The support of physicians has been attained successfully.
- Consultations of the Mother and Child Basic Insurance (Seguro Básico de Salud Materno –Infantil) is more frequent in this hospital, the provided during 24 hours per day, and the emergency medicine chests are used, and these are replenished with new medicines the following day.

- Contract a professional Pharmacist.
- Provide training for personnel.
- Elaborate a Manual of Functions.

- Elaborate a Manual of Procedures.
- Provide signs indicating the location of the pharmacy.
- Prepare prescription form pads with one original and one copy, for a better control of medicines.
- Coordinate monthly meetings between Directors, administrators and persons in charge of the pharmacy, to discuss the consumption of medicines and the situation of those that have no movement.

# **ACCOMPLISHMENTS**

- The pharmacologic –therapeutic committee was conformed.
- A Basic List of Medicines was elaborated.
- Emergency medicine chests were organized for Pediatrics and Gynecology.
- All money collection is done at the central cashier.
- The money collection of the Rotating Fund has increased.
- Take inventory of medicines and settle differences that are carried over from previous years.

# 2.2.2 MANAGEMENT OF SUPPLIES (CONSUMABLES)

The Materno – Infantil Hospital assigns an annual budget for the acquisition of hospital supplies, which are purchased according to need and when required, the quantities purchased are small given the resources generated by the hospital are limited or scarce.

The warehouse controls the stocks manually, by means of the use of card files and has no access to computerized work.

Purchases are done through Requisitions filled- in at the Solicitor's Unit, and go to the Administration approval. The person in charge of the warehouse goes out and gets quotations from commercial stores. This is done in this way because these types of purchases correspond to the "Minor Purchases" category within the Basic Norm of Administration of Goods and Services, authorized for an amount of up to Bs. 60,000.

The purchase is awarded upon the basis of a comparative table, submitted to the administrator who approves the purchase. After that, the Purchase Order is sent to the supplier.

The in- coming materials and supplies, are entered in the warehouse with the remittance note and the invoice along with the purchase order.

Once recorded, all documents are sent to administration for the authorization for payment.

- Contracting of personnel shall be done according to position and functions.
- Elaboration of a Manual of Functions.
- Elaboration of a Manual of Procedures.

- Training for the position (manual of functions) and ways of costing the products.
- Offer stability of employment.
- Elaborate and report to the administration the monthly movement of materials and supplies, for timely recording and accounting.
- Facilitate means and conditions for the storage of products; also provide a computer for a better warehouse control.
- Create forms for the requisition of materials, remittance note and purchase forms.
- Create the Acquisitions Committee.
- Carry out the physical valued inventory and settle the existing differences in the card index to make a fresh start with new records.
- Report every month the movement of materials and supplies of the warehouse, sending a report to the administration for accounting purposes.

# 3. EQUIPMENT MAINTENANCE

#### 3.1 HOSPITAL GERMAN BUSCH

During the evaluation carried out in the month of July, 2002, the lack of maintenance of medical equipment was evident. The majority of these equipment pieces have already completed their useful life, consequently to keep them working a considerable maintenance effort is necessary both preventive and corrective. The hospital does not have the qualified professional personnel to carry out such services. The person who is in charge of equipment has gone through training courses to become a plumber and an electrician; however, these are not sufficient conditions to train him in the maintenance work of medical equipment, nor they qualify him for performing such work.

Due to this scarce preparation of the person in charge of equipment maintenance and responsible for their functioning, his performance during the teaching and training period was very low, because of his lack of technical knowledge. The same poor results were obtained during the follow up and monitoring period of the training program.

Another limiting factor was his lack of knowledge on the use of tools and instruments used in the repair of medical equipment, given the hospital does not have this type of instruments.

- Contract professional personnel in the area of Biomedical Engineering for the maintenance of certain equipment.
- Contract the Technical Service from the equipment suppliers and / or equipment manufacturer representatives in the country.
- Carry out a selection of equipment, eliminating those that are in bad condition, following the in standing norms and procedures.
- Elaborate maintenance and utilization protocols from the "Control Sheet" for each piece of equipment.
- Elaboration of service and operation manuals.
- Elaboration of service diagrams.
- Incorporate equipment received from donors, to the fixed assets record.
- Give priority to the maintenance of the surgery room equipment to guarantee good quality of surgical work.
- Replacement of out of order equipment with new equipment.

# 3.2 MATERNO INFANTIL HOSPITAL

During the period for the monitoring of activities developed in the teaching and training period, guides were prepared for the follow up work. The person responsible for equipment maintenance did not comply with the guidelines, because he does not have professional formation in the area of Biomedicine Engineering; he limits his work to maintenance of electricity and plumbing.

The training program was designed in accordance with the terms of reference, for people who have professional formation and not for an elementary technical level. Notwithstanding these limitations, this technician assimilated several concepts and since that time he performed a different maintenance schedule for laboratory and operating room (surgery room). His work improved given some advancement was noted.

The lack of tools and special instruments does not permit to carry out maintenance work on more complex equipment. No intent was made to repair the latter, given it would become a serious responsibility.

These types of repairs were commended to a maintenance specialist who did his work under the supervision of the hospital's worker. Such is the case of the autoclave sterilizing equipment that was repaired outside the hospital by external persons.

In general, it may be said that as a consequence of the training course, control brochures have been elaborated, using them the hospital personnel may apply a follow up of equipment, with information on their condition and repairs or maintenance performed on them. In like manner, brochures were prepared for specialized work on X Rays, anesthesia and ventilation erquipment, however these were not applied or used, even though these pieces of equipment need maintenance and repair because their use has become problematic. The explanation form the hospital was that they do not have economic resources for this type of service. As a consequence, the service sheets were delivered to the Direction, in order to give a better idea at the higher levels of the hospital, of the importance of applying maintenance work to these pieces of equipment and at the same time convey the message of a more rational concept of the functioning of these equipments. The reading of these maintenance service sheets reflects the positive intention to improve the service of all the equipment that the hospital possesses, and stressing that the person, who is currently in charge of maintenance, carries out his work only to the extent of what he was able to assimilate during the training course.

The lack of tools to carry out a primary diagnosis for some pieces of equipment, such as the gases regulating machine; cardiologic (human heart) simulator, luminosity meter, Thermistor, tachometer, oscilloscope, "RX" tool, etc., does not allow the technician to apply his knowledge nor guarantee a goods repair.

- Contract professional personnel in the area of Bioengineering.
- Make a selection of equipments that are in bad condition to eliminate them form the fixed assets record, in accordance to established norms and provisions.
- Purchase tools and instruments for the repair of equipment.
- Apply a treatment to water to eliminate its hardness, which damages equipment.
- Elaborate maintenance protocols and establish the use of the "Control Sheet" for each piece of equipment.
- Elaborate service and operation manuals.
- Elaborate service diagrams.
- Incorporate donated equipment to the fixed assets record.
- Urgent repair of out of order equipment, using the services of specialized companies.
- Assignation of funds for the purchase of spare parts, avoiding improvisation and "adaptation."
- Contract the equipment supplier's Technical Service and / or representatives of the brand Bolivia.

 ${\footnotesize 3} \ {\footnotesize {\sf RESULT OF EDUCATION/TRAINING}} \\ {\footnotesize {\sf FOR 2 CSs AND MEDICAL BOAT}}$ 

# Report on the activities carried out to strengthen Primary Health Care Attention by the personnel of the Health Districts of the Department of Beni

Santa Cruz, November 28 2002

# Report on the activities carried out to strengthen Primary Health Care Attention by the personnel of the Health Districts of the Department of Beni

# **Background**

In the Department of Beni, a study is underway oriented towards strengthening the health districts. This study is financed by the Japanese International Cooperation Agency (JICA).

The purported result of this project is a master plan to strengthen the districts in the health system for the Prefecture of the Department of Beni by the year 2010.

Project's general framework for strengthening the healthcare system in the Department of Beni, provides for a training program for Primary Healthcare for personal in two health centers: Centro de Salud Nueva Trinidad, in the city of Trinidad, Beni; and Centro de Salud Santísima Trinidad, in the Moxos province, and for personnel on the Floating Clinic Kenko-Go operating on the Mamoré River.

In order to strengthen primary healthcare attention by personnel in the health centers and the floating clinic mentioned above, the following activities were proposed:

- 1. **A seminar on primary healthcare attention** was conducted by healthcare personnel from the Prefecture of Beni and coordinated by SEDES personnel in de Trinidad.
- 2. **Theoretical and Practical training**, for healthcare personnel from the participating centers, covering laboratory techniques for diagnosis prevalent diseases, to enable the adequate and effective use of the new equipment available at the health centers. This training was imparted at the facilities of Centro Nacional de Enfermedades Tropicales (CENETROP)(Nacional Center for Tropical Diseases) and the instructors were professionals from CENETROP with experience in the subject matter.
- 3. **Establish a operations and maintenance system** so that the personal from the participating health centers use the available equipment correctly in order to secure the equipment's long-term operation. This activity was also conducted by CENETROP personnel with experience in handling medical equipment. The training was given on site, with CENETROP personnel traveling to each of the participating centers.

# **Activities Carried out**

- 1. Seminar on primary health care (organized by SEDES in Trinidad).
- 2. Theoretical Practical training on laboratory techniques (organized by CENETROP personnel).
- 3. Establishment of a operations and maintenance system for new equipment at the health centers and hospital boat (organized by CENETROP personnel)

# 1. Seminar on primary healthcare attention conducted by personnel from the Prefecture of the Department of Beni and coordinated by personnel from SEDES in Trinidad.

The report on this activity, elaborated by Dr. Eduardo Solares, is attached at the end of this section (Annex 1).

Pursuant the terms of the agreement, this activity was carried out by SEDES Beni personnel and coordinated by the SEDES Director.

According to the report evacuated by Dr. Eduardo Solares, SEDES Beni Technical Director, on September 11 and 12 a Practical Training Course was held for Primary Healthcare (APS – Spanish language acronym), for employees at:

- Centro de Salud Nueva Trinidad 6 people 2. Centro de Salud Santísima Trinidad 4 people 3. Floating Clinic KenKo-Go 8 people
- 4. SEDES Beni 4 people

During those two days, the 22 participants received training, in the city of Trinidad, on the selected subjects that personnel from SEDES Trinidad, considered important to strengthen APS activities.

The topics dealt with were:

#### 1. Basic Health Insurance

Contemplating the following individual topics:

Handling CAPOS Insurance coverage Insurance card distribution

#### 2. Environmental health

Contemplating the following individual topics:

Handling water Basic health and hygiene norms Preventing EDAS (Acute Diarrheic Illness')

#### 3. Tuberculosis

Active search for cases Clinical diagnosis Laboratory Use Handling patients Treatment and follow-up

# 4. Health Management

The topics were:

Direction Management Control Follow-up Evaluation

Each event participant received bibliographic materials to be consulted later with regard to individual topics.

The personnel participating showed great interest in the subjects dealt with, thereby facilitating the instructors' activities.

The report concludes by saying that (the participants) considered the event organized by SEDES Beni and JICA a positive experience.

# Theoretical and Practical training in laboratory techniques (organized by CENETROP personnel)

In order to follow through with the activities established in the contract regarding laboratory technique training to carry out activities for maternal/pediatric care, diagnosing parasitism and laboratory tools required to work in tuberculosis control programs, a workshop/seminar was organized divided into three major categories encompassing the activities and skills necessary to train personnel in the three areas mentioned above. The three major areas were:

- 1. Parasitology
- 2. Hematology
- 3. Bacteriology

The seminar /workshop on these three areas was held in CENETROPS's facilities under the conduction of qualified and experienced personnel, on September 6 to 8 of the year 2002.

The workshop was conducted in a six-hour daily schedule, over three days, and included orientation lectures followed by group practical classes comprised of participants from each of the health centers involved.

During the realization of the seminar / workshop it was possible to observe that, in general, all the personnel was willing to learn; however, technical errors requiring more prolonged training were also observed.

The following section describes each of the topics included in the training sessions in succinct detail.

At the conclusion of each training area, there is a copy of the didactic and reference material used.

# TRAINING COURSE ON BASIC LABORATORY TECHNIQUES

#### **PARASITOLOGY**

Course characteristics: Theoretical - Practical

Place: Centro Nacional de Enfermedades Tropicales (CENETROP)

(National Center for Tropical Diseases)

Date: September 6 to 8, 2002

Participants: 12 people from 3 healthcare centers from the Department of

Beni (Pilot Centers for implementing the Primary Healthcare

Attention)

# **Course Objectives:**

"Training for twelve people (doctors, biochemists, laboratory technicians and lab assistant) from three urban and rural healthcare centers in the Department of Beni (Santísima Trinidad, Nueva Trinidad and Boat Health Center) on basic laboratory techniques for diagnosing digestive tract - parasitism and malaria, as support for "Primary Health Care".

#### **CONTENT:**

# **Copro-parasitological testing**

# a) Theoretical training:

Defining parasites of the digestive tract, General aspects of parasitology, direct and indirect methods of diagnosis, taking the fecal sample, sample conservation, classification of digestive tract parasites, diagnostic techniques (direct examination, concentration method, Graham's or Scotch-tape method)

# b) Practical training:

Direct examination, concentration examination, recognition of protozoan and helmints.

# c) Reporting the results

#### Malaria

#### a) Theoretical Training:

Definition of Malaria, etiological agent, morphology, means of transmission, clinical aspects, laboratory diagnosis (advantages and disadvantages)

#### b) Practical Training:

Taking a sample, Preparing and tinting the blood drop and the fine smear, recognizing Plasmodium.

# Other topics

# a) Bio-safety

b) Use, care and preventive maintenance of laboratory materials and equipment

#### **ORGANIZATION**

Subject to programming, 1 day theory and 2 days lab practice.

# **BIBLIOGRAPHY**

- General Parasitism Pathology
- Ecology and Parasites
- General characteristics of digestive tract parasitism
- Treatments for parasitism and therapeutic table
- Manual for Basic Healthcare Laboratory Techniques
- Color imagery of intestinal parasites and Plasmodium

# **COMMENTARY**

In practical training sessions, each group of four people (from the same center) comprised of one doctor, a biochemist or technician and lab assistants, showed a great deal of interest in acquiring greater knowledge to implement the techniques in their Health Care Centers. Most of them said that they considered the training period too short.

The participants were able to identify the materials and reactive agents missing at their centers to implement the techniques.

It would be very useful to conduct training for a longer period, in order to guarantee the work in each center.

# **HAEMATOLOGY**

COURSE CHARACTERISTICS: Theoretical and Practical

DATE: September 6 - 8, 2002

PLACE: National Center for Tropical Diseases

(CENETROP)

# **COURSE OBJETIVES:**

Train healthcare personnel (Doctor, Biochemist and Lab assistants) in basic Hematology laboratory techniques and preparing the reactive agents for a full Haemogram.

### **CONTENT:**

- 1. CORRECT LABORATORY PRACTICE
- 1.1 Techniques for using pipettes and suction mechanisms
- 1.2 Technique for not ingesting infectious material
- 1.3 Serum separation technique
- 1.4 Techniques for using the centrifuge
- 1.5 The laboratory clearing service.
- 2. TAKING THE SAMPLE
- 2.1 Taking the blood sample
- 2.2 Technique
- 2.3 Handling the sample
- 2.4 Disposing of needles and syringes
- 3. PREPARING BLOOD SMEARS
- 4. TINTING BLOOD SMEARS
- 5. COMPLETE HAEMOGRAM
- 6. HAEMATOCRYTE
- 7. HAEMOGLINE FOR THE CYANO-METHAHEMOGLOBIN METHOD
- 8. SPEED OF CELULAR SEDIMENTARION
- 9. WHITE-CELL COUNT
- 10. LEUCOCYTE FORMULA
- 11. BLOOD-TYPING

# 12. HANDLING THE MICROSCOPE

# **BIBLIOGRAPHY:**

- HAEMATOLOGY PROCEDURES (CENETROP)
- BASIC LABORATORY TECHNIQUE MANUAL ( OPS )
- ATLAS OF HAEMATOLOGY

# **COMMENTARY:**

Training was conducted in groups of four people (from the same center) carrying out the theoretical part first then followed by the techniques in practical sessions.

It was possible to observe interest and concern for acquiring greater knowledge to implement the technique at the jobsite.

The participants expressed their concern regarding the length of the training period, indicating that it should be longer to train in each technique.

Longer training and their workplace would be beneficial for each of the participants.

# **BACTERIOLOGY**

Training site: National Center for Tropical Diseases (CENETROP) (Centro Nacional de Enfermedades Tropicales) in Santa Cruz de la Sierra

**Date:** September 6 - 8, 2002

**Scheduled time:** 36 hours

Nº students: 12

# **Theoretical / practical Course**

# **Training Objective:**

Prepare Healthcare personnel (Doctors, Biochemists, and Laboratory Assistants) in the urban and rural area of Trinidad, Beni in basic techniques for laboratory diagnosis, in the field of bacteriology, as support for Primary Health Care.

# **CONTENT:**

### 1. General Urine Test:

Definition of the urine test.- Physical examination: Density, Color, Appearance.- Chemical examination (using reactive paper slips): pH, definition, Blood, Cetones, Glucose, Proteins (heat reaction), Nitrites, Bile Salts, Bile pigments.- Sediment: reading the microscope, semi-quantitative report.- Gram's Tincture: Basis,

tincture technique, Reading.- Reporting the results.-

# 2. Bacilluscopy for Tuberculosis:

Ziehl tincture technique- Hot Neelsen testing, Reading the microscope, Interpreting the results, Reporting the results.-

# 3. Analysis of the results report:

Clinical cases in Urine, Positive, negative Bacilluscopy, Quality control, Bio-safety norms for processing.-

# **Theory:**

Eliminating waste at a healthcare center

# **VARIOUS**

- Using the microscope

# **Bibliography provided:**

- Laboratory Manual for the National TB Program, Year 2000. Ministry of Health and Social Welfare. (1 per group)
- Steps to follow to prepare a smear for bacilluscopy.- Tincture.- Eliminating waste; Guide on Tuberculosis for High-Risk Countries, Pag. 56-67.
  Unión Internacional contra la Tuberculosis y Enfermedades Respiratorias, 1993.

# **Recommended reading:**

Atlas of Urine. Author: Graff. Editorial Panamericana. Buenos Aires- Argentina

# Personnel Knowledge level:

3 Doctors: Regular 1 Bio-chemist: Good

8 Laboratory assistants: Regular

# **Commentary:**

It was possible to detect great interest and concern for acquiring the knowledge on behalf of the medical and laboratory assistant personnel, but it was the first time they did the practice in a laboratory. There was not sufficient time to go into preparing tinctures and reactive agents.

It is recommended that an opportunity for additional in-hospital practice be provided for one or two people from each group, in guarantee the work's quality and provide additional self-assurance in the work to be done.

# Establish an adecuate operational and maintenance system for laboratory equipment

In order to establish and adequate system for handling equipment at each of the healthcare centers participating, and orient personnel in the application of the basic norms to secure an extended lifecycle for the laboratory equipment, a visit by trained CENETROP personnel was organized to elaborate an inventory on the equipment available, verifying status and operability, analyzing with the personnel the use of each piece of equipment and the technical difficulties encountered, alter which a document detailing the basic norms for medical equipment maintenance was provided.

The following is a detailed report on the activities carried out in each of the centers visited.

# CENTRO DE SALUD SANTISIMA TRINIDAD

Trip Date:	October 3 (Thursday) and 4 (Friday), 2002		
Place :	Santísima Trinidad (Beni)		
Trip Objectives:	Evaluate the Centro de Salud Santísima Trinidad for Primary Health Care		
	Implementation		
Personnel assigned for	Dr. Naomi Iihoshi		
the mission:	Dr. Yelin Roca		
	Dr. Roxana Loayza (Laboraotry Network)		
	Sr. Santiago García (Driver)		
Means of	Land		
transportation:	Pick – up truck pertaining to CENETROP		
ACTIVITIES			
Thursday, Oct. 3			
4:30	Departure from Santa Cruz		
13:00	Arrival at Centro de Salud Santísima Trinidad		
11:00	Lunch in Isinuta (Chapare, Cochabamba)		
13:10	Meeting with center personnel		
	Dr. Lucia Quispe González (dentist)		
	Nurses Aide Carlos Fabricano Moye		
	Nurses Aide Juan de Dios Maoye Yuco		
	Nurses Aide Rosario Rosendo Viruez		
	PERSONNEL ABSENT		
	Dr. Gualberto Campos Ortuño (Center Director)		
	Karen Mercado (Laboratory Technician)		
13:20	Identifying laboratory and health center materials and equipment (list		
	attached)		
	Installing microscope (details in attached list)		
	Installing compressor for dental equipment		
	Checking macro - centrifuge operation		
15:00	Microscopic observation and some tests		
	- Copro-parasitological		
	- White-cell count		
	- recommendations		

# GNERAL DATA ON THE INSTITUTION EVALUATED

GIVEN DITTION THE HISTORY EVILLENTED						
Institution name:		CENTRO DE SALUD SANTISIMA TRINIDAD				
Type of establishment:		Public institution subordinate to the Regional Secretariat for				
		Beni (SEDES-BENI) subordinate to the Ministry of Public				
		Health and Social Welfare and the Municipal government of				
		San Ignacio de Moxos				
Attention level:		First level of attention (Health Center) offering care in:				
		OB/GYN, Odontology				
Location:						
Department: Province: Location:		Beni San Ignacio de Moxos Santísima Trinidad				
					Health District:	2 (San Ignacio de Moxos)
					Zone:	Rural
Radio:		5.699 LSB / 8.800 LSB				
Person responsible:		Dr. Gualberto Campos (DIRECTOR DEL CENTRO)				

No. beds	1
No. patients attended per month:	180
Population covered by the institution:	3090
Number of health service	1. San Pedro
institutions remitting to this	2. Trinidadcita
institution:	3. Puerto San Lorenzo
	4. Management Center
Human Resources:	Dr. Gualberto Campos Ortuño (Ministry Health Fund)
	Dr. Lucia Quispe González (Ministry Health Fund)
	Nurses Aide Carlos Fabricano Moye (Municipal Fund)
	Nurses Aide Juan de Dios Maoye Yuco (Ministry Health Fund)
	Nurses Aide Rosario Rosendo Viruez (Municipal Fund)
	Technician Karen Mercado (Municipal Fund)
Building characteristics	Healthcare center was recently built and is in the process of
	installation.
	Stations:
	- Nurses' station with small space for laboratory
	- 1 examination room
	- Labor room with recovery area
	- Dentistry station
	- 2 bathrooms
	- laundry area
	- kitchen
	- 3 apartments located next to the health center building
	to lodge personnel.
	OBSERVATION: the laboratory area is inside the nurses'
	station. We recommend that these tow areas operate
	separately.
	Electrical installation:
	- Good lighting
	- Receptacles in each room and in a quantity sufficient
	for basic healthcare activities

Equipment	Number	State
Radio	1	Working
Microscope	1	Working
Macro centrifuge	1	In good conditions
Water distiller	1	In good conditions
Refrigerators	2	Working
Incubator	1	In good conditions
Sterilizer	1	Working
Dental equipment	1	Working
Scale	1	In good conditions
Incinerator	1	Working

# **OTHER SUPPORT ACTIVITIES:**

Date	Activities	
Thursday, Oct. 10,	Advice on the list requesting laboratory supplies for the center	
2002		
As of November	Advisory work with student Limberg Vaca for him to assist in the work	
	"determining the incidence of digestive tract parasitism (copro-parasitologica	
	method), tuberculosis (bacilluscopy) and anemia (haematocryte and	
	hemoglobin) to establish a base line in the communities" under the	
	responsibility for the Centro de Salud Santísima Trinidad.	

# **FLOATING CLINIC Kenko-Go**

Trip Date:	Wednesday, November13, 2002	
Return Date:	Friday, November 15, 2002	
Destination:	Trinidad (Beni)	
Trip Objectives:	Evaluate Primary Health Care Implementation in:	
	Centro de Salud Nueva Trinidad	
	Floating Clinic Kenko Go	
Carried out by:	Dr. Roxana Loayza (CENETROP)	
ACTIVITIES		
Thursday, November 14		
1.	Meeting with Boat personnel to program the activity:	
	Dr. Soledad M. Díaz Moreira	
	Ms. Yovana Rivadineira	
	Mr. Rolando Condori	
2.	Visit to SEDES	
3.	Visit to the Boat to conduct inventory	
4.	Identification of health center and laboratory equipment and materials	
	(inventory attached)	
	Checking operation of macro centrifuge	
	Checking operation of microscope	
5.	Microscopic Observation:	
	- Blood Drop and fine smear	
	- Bacilluscopy	
	Recommendations.	

# November 15, 2002

1. Visit to Centro de Salud Nueva Trinidad

2. Meeting with center personnel

Pura Cossio RN

Nurses Aide Gladys Ríos Nurses Aide Aurora Santalla

PERSONNEL ABSENT

Dr. Sara Garrón (M.D. General Practitioner)

Dr. América Torrico (Pharemaceutical Biochemist) (\*\*)

3. Identification of health center and laboratory equipment and materials

(inventory attached)

4. Meeting with Dr. Sara Garrón

# GENERAL DATA ON THE FLOATING CLINIC KENKO GO

Institution Name:	BARCO DE SALUD KENKO GO	
Type of Institution:	A Public institution subordinate to the Prefecture of Beni	
31	Managed by CARITAS	
Attention Level:	First Level attention offering services in:	
	-General practice	
	-Odontology	

		pharmacy		
Location:				
	Department:	Beni		
	Health District:	Pertains to District 1 (Trinidad), but its run includes docking in Districts IV and V Coverage: 28 communities in the Mamoré, Yacuma and Moxos		
		Provinces		
D 11	Zone:	Rural		
Radio:		8486 USB		
	esponsible:	Dr. Soledad Mónica Diaz Moreira		
No. Beds		1		
day run:	nts attended in a thirty	1102		
No. patier services:	nts using laboratory	63		
	of health service as remitting to this	In addition to the 28 communities it covers, it also reaches <b>Centro de Salud Exaltación</b> pertaining to another district, also remits to the Boat.		
Human re		Dr. Soledad Mónica Diaz Moreira (*) Dr. Ismael Gimenez Herrera Mr. Rolando Condori (*)		
		Ms. Rovana Rivadineira (*)		
		Nurses Aide Heidy Cortéz Dorado (*)		
		Support personnel:		
		Tomas Noeteko		
		Zoilo Alferi Cuevas		
		Leny Arias Yonima		
		(*) Personnel participating in the training courses conducted by CENETROP		
Building characteristics:		Stations:		
		- 1 laboratory measuring 1.75 x 2		
		- 1 examination room (General practice) measuring 3.10 x 2		
		- 1 dentistry station measuring 3.10 x 3.10		
		- 1 Pharmacy measuring 4 x 2 _		
		- 1 cabin for hospitalization (1 bed)		
		- galley		
		- 7 cabins for personnel		
		OBSERVATIONS:		
		- The laboratory has faulty ventilation		
		- Electricity provided by generator		
		- Regular electrical installation		
Tests carried out by the Laboratory:		They conduct:		
		- Copro- parasitological testing		
		- Blood drop and fine smear testing		
		- Bacillosocopy		
		- Glycemia testing (Qualitative quick testing)		
		- Pregnancy testing		
		OBSERVATIONS:		
		- No haemograms done due to lack of reactive agents.		
		- Reactive agents used for blood drop and bacilluscopy are		
		donated by programs.		
		<ul> <li>No direct urine testing for lack of practice and lack of reactive agents.</li> </ul>		
		=		
		- They suggest additional training for identification in each		

Г	T
	area.
	- Control conducted on blood drop tests and the results were
	discordant.
Inventory:	Laboratory equipment:
-	- 1 Tenso - brand microscope in good conditions
	- 1 Macro-centrifuge (Rolco Brand) for 16 test tubes with a
	max. speed of 4000 rpm
	(Note: in good conditions, but unused because they don't now
	how and they do not conduct the tests requiring its use)
	- 1 Water distiller
	(Note: It is in good conditions but not in use because of the
	amount of soil in the water and according to manufacturer's
	recommendations that type of water cannot be used).
	- 1 Refrigerator (only used by the pharmacy)
	- 1 Space heater
	(Note: In good conditions but not in use because of the amount
	of fuel it consumes)
	- 1 Scale (not uses since there are no reactive agents to be
	weighed)
	weighed)
	I showstown use mosetive execute (moseided by moseume in liquid forms).
	Laboratory use reactive agents (provided by programs in liquid form):
	- Giemsa
	- May Grunwald
	- Immersion oil
	- Romanowsky
	- Fuccina
	- Acid alcohol
	- Methyl blue
	Laboratory Materials:
	- 100 ml Syringes
	- 4 bottles Koplin (1 donated by the Malaria program)
	- Glass pipettes 1, 2, 5, 10 ml 6 each
	- 37 cone bottomed test tubes for urine
	- 1 Micro-pipetea 25 ul
	- 1 Micropipette stand
	- 1 grid stand for 24 tube
	- Erlenmeyer flasks 100, 250, 500 ml
	- Precipitation flask 150, 250, 600 ml
	- Test tube 100, 250
	- 12 glass jars with lids
	- 12 glass Petri dishes ( complete)
	- 2 large plastic spatulas
	- 1 set small spatulas
	•
	- 34 test tube stoppers
	- 1 Neubauer Chamber
	- 1 pipette for red cells
	- 1 pipette for white cells
	- 1 cell counter
	- Lancets
	- 4 boxes object carriers (donated by CARITAS)
	- object covers (donated by CARITAS)
	- 1 box gloves (donated by CARITAS)
	- 1 glucometer
	- 40 strips for determining glucose level

# CENTRO DE SALUD NUEVA TRINIDAD

Institution name:		CENTRO DE SALUD NUEVA TRINIDAD		
Type of institution:		Public institution subordinate to the municipality		
Attention level:		First Level Attention for:		
		-General Medicine		
		-Odontology		
		-OB/GYN		
Location:				
Location.	Department:	Beni		
	Health District:	Pertains to District 1 (Trinidad)		
	Zone:	Rural		
Radio:	2010.	8486 USB		
Sector.		Nueva Trinidad		
Person res	ponsible:	Dr. Sara Garron (Jica)		
1	<u>.</u>	Dr. Marco Antonio Aponte (SEDES)		
No. Beds		1		
No. patient	ts attended per	150		
month:				
No. patient	ts attended by lab	50		
services:				
	f healthcare	No referrals		
	s remitting to this			
institution:				
Human res	sources:	Dr. Sara Garrón (*) (Hippis II FUND)		
		Dr. Marco Antonio Aponte (TGN FUND)		
		Dr. Carlos Arteaga (TGN FUND)		
		Ms. Pura Cossio (*) (Hippis II FUND)		
		Nurses Aide Gladys Ríos (*) (Hippis II FUND) Nurses Aide Aurora Santalla (Municipal FUND)		
		Support personnel:		
		Fabián Bravo (Municipal FUND)		
		Ma. Luisa Zabala (Private Funds)		
		That Zulou Zuculu (TTVate Tulius)		
		(*) Personnel participating in training conducted by CENETROP		
		NOTE.		
		Dr. América Torrico (*) (Bioquímica), participated in the training but		
		the promised position under Hippis funding was not allocated, and for		
		the moment she is not working at the Centro until her labor situation		
		is clarified.		
Building c	haracteristics:	Stations:		
		- 1 laboratory measuring 1.75 x 2.5		
		- Nurses station		
		- 1 dentistry station		
		- 1 general practice examination room.		
		- Labor room with recovery area		
		(Nota. This is not functioning due to lack of material and		
		equipment)		
		- 2 bathrooms		
		- laundry area		
		- 1 small room next to the laboratory used as a storage area		
		OBSERVATIONS:		

Tests carried out by the laboratory:	- Good electrical installation - Good ventilation - No safe drinking water, a tanker truck fills the water tank - There is an unfinished incinerator, missing the metal door.  For the moment no testing is done because of the problem suffered by the biochemist, mentioned previously and no one lese can take charge of the laboratory, due to lack of time.  In September and October, only the following tests were carried out: - Copro-parasitological - Glycemia testing ( Quick qualitative method)	
Inventory:	Laboratory equipment:  - 1 Tenso – brand microscope in good conditions  - 1 Macro-centrifuge (Rolco Brand) for 16 test tubes with a max. speed of 4000 rpm  (Note: in good conditions, but unused because they don't now how and they do not conduct the tests requiring its use)  - 1 Water distiller  - 1 Refrigerator (only used by pharmacy)  - 1 space heater  - 1 Scale  NOTA: All this equipment is presently in storage because it is not in use.  The laboratory has no reactive agents  Materiales del Laboratorio:  - 100 ml Syringes  - 3 bottles Koplin  - Glass pipettes 1, 2, 5, 10 ml 6 each  - cone bottomed test tubes for urine  - 1 Micro-pipette 25 ul  - 1 Micro-pipette 25 ul  - 1 Micropipette stand  - 1 grid stand for 24 tube  - Erlenmeyer flasks 100, 250, 500 ml  - Precipitation flask 150, 250, 600 ml  - Test tube 100, 250  - 12 glass jars with lids  - 12 glass Petri dishes ( complete)  - 2 large plastic spatulas  - 1 set small spatulas  - 1 set small spatulas  - 34 test tube stoppers  - 1 Neubauer Chamber  - 1 pipette for red cells  - 1 glucometer  - Lancets  - 1 glucometer  - strips for determining glucose level	

# **Final Comments**

# Regarding the physical infrastructure

In general, the physical infrastructure of the two centers and the floating clinic, is good and has the elements indispensable for carrying out their activities in providing primary health care. They have basic utilities such as electricity and water, except in the case of the floating clinic, on which the water is of poor quality.

The electrical installations are in good conditions, thereby permitting adequate connections for the electrical equipment.

# Regarding the centers' equipment

The laboratory equipment is of good quality and a good maintenance program will insure their long-term operation.

The equipment available in the health centers are adequate for the level of attention to be provided.

The personnel in general are capable of handling the equipment adequately and can make efficient use of the equipment

# Regarding the supply of reactive agents for the laboratories

This is a critical aspect of any laboratory and it is important that the supply of reactive agents be timely and adequate with regard to quantity and quality, so that the laboratory can work normally. Therefore, there should be a small storage area in each center, which will allow the centers to have a stock of reactive agents on hand, to thereby ensure their normal functioning.

# With regard to healthcare personnel

In general, the personnel at the healthcare centers have shown a great deal of interest in receiving technical training that will allow them to improve their personal skills to achieve improved performance in the workplace. Although during the CENETROP training sessions some shortcomings were detected, these can be resolved with regular training sessions in CENETROP and in their workplace, in an alternate manner. These training or refresher periods, in CENETROP, can last a week and, if possible, could be scheduled to be held twice per year. At the same time, one week visits by CENETROP personnel can be programmed, to reinforce what has been learned in our institution and resolve practical difficulties *in situ*. In that way, a training program could be programmed for at least one year, to provide continuity for the process begun during the workshop/seminar conducted by CENETROP during the month of September, 2002.

4 OWN EVALUATION REPORT ON PILOT STUDY

# 4.1 Own Evaluation Report on Pilot Study First Monitoring

4.1.1

Hospital Presidente German Busch

# **REPORT**

# FIRST MONITORING OF HOSPITAL GERMAN BUSCH

**JULY 2002** 

# PROGRAM OF ENHANCEMENT OF THE HOSPITAL GERMAN BUSCH

1.-The German Busch is the only state general hospital of II and III level of reference of the Department of the Beni that assists all the people that attend independently of gender that are bigger than 12 year and that don't present with gineco-obstetric pathologies, giving attention in health with resolution capacity according to the specialist that work in this hospital whith the little equipment and infrastructure that it possesses.

Although it gathers these characteristic, many times their accessibility is not flowed by ignorance of the specialty, there is not orientation on behalf of the outlying centers, excessive bureaucracy in the institution mainly for economic problems and our populations idiosyncrasy.

2.-we do not have defined populations covering however what causes us errors is our statistic, there, are some parameters that it is worthwhile to remember :

Trinidad according to the last Census has a population of 69.000 inhabitants, of those

Which the C.N.S.S it covers the 25%, COSSMIL 3-5%, being 70% for the Hospital German Busch the posts and the Materno Infantil , without defined covering . however another characteristic that has the Hospital Busch is that although it assists children and women for for the special ties that it possesses , the frequent pathologies of specialty that these payients present (gineco-obtetric and infantile) they are not assisted in the Hospital, the same oners are derived to the Materno Infantil Hospital.

When we speak that our Hospital is the Center of reference of the whole Beni we refer to a population of 300.000 inhabitants.

To refer with approach on the covering a meeting has been requested with the SEDES to define the same ones, has a service of emergency-urgencies, of hospitalization and of external consultations.

### **EXTERNAL CONSULTATION:**

Morbility causes, for falling order: Arterial Hypertension, Urinary Infections, conjunctivitis, Lumbalgias, Arthritis Reumatoidea, Diabetes, allergic Dermatitis, Heart Inadecuacy, etc.

The number attend during four months (January-april of the present year ) it was of 2109of the same ones 1968 they were new consultations and 141 repeated.

Although these data are exact it is necessary to emphasize that there is sub-registration of the same ones and external consultations didn't also exist for surgery, situation that is being corrected.

# **HOSPITALIZATION-**

The hospitalization reason generally is entrance for emergencies or transferred of the posts they are: Colelitiasis, Colecistitis, EDA, Fractures, Urinary Infections, Heart Inadequacy, Heard traumatism, Arterial hypertension, Appendicitis, etc.

The hospitalization total during the referred quarter (January-April) it was of 693 of those which 6 died before the 48 hours and 9 after the 48 hours.

They were carried out in these four months 192 surgeries, 1857 laboratories, 728,5 badges to 563 patients.

The causes of mortality are chead traumatism, heart Inadequacy, Diabetes (complicated), Tuberculosis, Arterial Hypertension ,politraumatism, etc.

# 3 and 4 - The Hospital depends on 2 intitutions:

- ❖ Municipal mayor s office.- In charge of infrastructure equipment and maintenance.
- ❖ SEDES .-In charge of all that is personnel or items .The Mayors office has a representative like Administrator in the Hospital who presents the revenues and expenditures of thr Hospital activities monthly. Of the received help of this they are:
- Spanish credit negotiated by H.A.M. in bid for equipment to cover some primordial necessities that we have somehow
- ❖ We work with the Insurance of Age that embraces all the grows-ups of 65 years of the capital of the departament whose payment is made by the H.A..M. by means of the Insurance of Roads, but that it is also insufficient to cover the necessities of these patients .
- ❖ At the moment we are supporting with the construction of three rooms dedicated for ecography, Radiology and Tomography.

We have a good relationship with this entity, but, we need more support mainly economic, we require a remodeling and equipment of the whole Hospital that never before has been the setting in mrch of a real planning and not of improvisations. As for the personnel of SEDES it is the one in charge of giving us the ITEMS

We count but they are not enough for whwt we have the necessity to hire 9 people and to pay with qwn resources(Nurses,Personnel of Support).

### Of the workers we have:

# DOCTORS.-

- ❖ 4 full times for guards doctors
- ❖ 2 full times and 1 half time for anesthesiology
- ❖ 1 and a half time for intensive Therapy
- ❖ 1 full time for general surgery
- ❖ 7 half time for Surgeries and specialties (Traumatology, Ophthalmology, otorrinolaringology, plastic surgery and burns, urology, Thoraxsurgery)
- ❖ 5 half time for specialties of intern Medicine ( Dermatology, Cardiology, Gastroenterology, Radiology, Neurology).
- ❖ 2 half time to contracts granted by HIPIC to cover surgeries of Emergencies.

# LABORATORY-

- ❖ 1 full times for professional in laboratory
- ❖ half times to contract for HIPIC
- 2 laboratory assistants

### **NURSING.-**

- ❖ 8 full times for graduates
- ❖ 30 full times for auxiliary
- ❖ 2 full times to contract for HIPIC.

# TECHNICAL SERVICES.-

❖ 4 full times (Social Service . 2 Technicians in Radiology, Auxiliar in Nutrition).

# ADMINISTRATIVE SERVICES-

❖ 12 full times (Administrador, Accountant, Warehouse accounting, Auxiliar. Of Estatistics, Oficces assistants, etc.)

# AUXILIARY SEVICES OF SUPPORT

❖ 25 full times (cleaning, laundry, kitchen, driver, etc)

It is worth while to remember that the full time of the doctors, lab professionals and of the graduates in Nursing is of 6 hours / day of Monday to Friday or 30hours week, they exist in each section of the hospital a chief that doesn't enjoy any Items that it is not of their basic, for example: The chief of Internal Medicine is Medical of guard that completes (48hours week), assists to the daily visits every day of the year 2 times a day and makes consultations of Internal Medicine in external clinic. The same way the chief of Surgery.

5. Patients generally arrive whose characteristic is that they are of economic, penitentiary. Scarce resources, old of age, abandoned, of asylums, transferred of counties or cantons with polipatologies that were already seen and treated in posts or other centers that attend while waiting for finding support to their wrongs and help, ignoring that this only Hospital probably stays with own resources that are few because there is not a good evaluation of the same ones since we don't have professional social worker, and our free index depending on the month it oscillates between the 50 and 70%

The human resources are controlled by their chief of section, personnel chief and direction. Some technical training is carried out the moment (in pharmacy, accounting, nursing, laboratory) and courses of quality like part of the incentive of this direction to the officials. We don't possess pharmaceutical professional, nor of companies that diminishes us our operation but not our aspirations since are qualifyng to personnel so that it completes in a better way the work.

- 7.- It has been requested to th3e Mayor's dffice who will be in the month of September, in such a way to give bigger transparency and responsibility to the administration. advancing to the same report has been requested to the different sections on equipment, infrastructure, etc. some of which have already presented us demonstrating that little equipment exists, most obsolete, where the maintenance was inadequate.
- 8.-It is had a pharmacy like parf of the revolving fund whose responsible is a worker of the hospital , pharmacy student that has been delegated to this position and qualified recently in Santa Cruz .

The medications used in the same ones are essential but there are others of commercial use, it fails that corrigiendo are. Of the total of earnings he/ she is devoted 10% for social service of the Hospital.

The price of the same ones compared those of the pharmacies is low.

- 9.- There are no systemsof Reference neither counter reference bet ween the different centers or posts, the relationship with the Materno Infantil Hospital as for patients is for via phone,
- 10.-Our only hospital completes the assistance function that is the way that projects its comunitary health, probably four the lack of resources. We have programmed make to make a club of Diabetics with personnel of the hospital

- 11.-If the reports are complemented requested by the SNIS, they are demanding and bureaucratic but they don t give the facilities and feedback doesn t exist on the part of them . In our Hospital we don t have means for a quick and opportune information (computer),however the statistics are correct, thanks to the merit of people that work efficiently in this section.
- 13.-We have forms of the illnesses of our means and those that are of immediate notification , carry out quickly.

The linking with Cenetrop is present and we have good relationship, they have always collaborated us and there is good bias for our personnels training, but our bigger problem is that we don't have equipment, technology human resources neither financial.

When we speak of weaknesses that we have in the Hospital we say that much is blame of the hard working, but we are in the will of improving to plan, to program but we require even this way of support of other organisms that allow us to demonstrate them that we can arrive to improvement .

Hospital Materno Infantil Dr. Jesus Vargas

# 4.1.2

# GENERAL REPORT OF ACTIVITIES HOSPITAL MATERNO INFANTIL BOLIVIAN – JAPANESE - TRINIDAD

# GENERAL REPORT OF ACTIVITIES MATERNO INFANTIL HOSPITAL BOLIVIAN-JAPANESE - TRINIDAD

# 1.- IMPACT UNDER THE CONDITIONS OF HEALTH. -

The Hospital Materno Infantil of the city of Trinidad, built and equipped thanks to the Japanese government's generous donation, comes to lend their services to the binomial mother boy from February of 1.984.

In the first years of operation it was seen in serious economic difficulties when not having the effective support of the Ministry of Health or of other Institutions and to have a great affluence on the other hand of patient assisted through the Social Service and to be a reference center to which the mothers and boy of any economic and social condition can appeal, so much of the city of Trinidad like of the whole Department of the Beni.

Classified as hospital of Third Level, it completes functions however as hospital of First and Second Level.

The implementation of the Seguro Basico de Salud, it has contributed fundamentally in the improvement of the economic situation of the hospital that, of a debit of Bs. 103.000 at May 31 1.999 have a credit of Bs at the present time. 63.565.-

Also thanks to the Seguro Basico de Salud, the accessibility has improved significantly. In this respect we can mention some comparative figures, as being:

<b>EXTERNAL CONSULTATION:</b>	<b>Pediatrics:</b>	<b>year 1.989</b> 2430
	Gineco-obstetrics:	year 2.001
SERVICE OF LABORATORY:	year 1	. <b>989</b> 2198 year 2.001 8493
SURGERIES		<b>year 1.989</b> 818 year 2.001 1.157
OCCUPATIONAL INDEX		<b>year 1.989</b> 33 % year 2.001

# 2.- COVERING OF THE SERVICES OF HEALTH. -

Integral attention to the woman: has a prospective population of 2.591, it is hoped to reach a goal of 80%.

Integral attention to the smaller than 5 years: has a population of 8.515, it is hoped to reach 100% in all the programs.

# 3.- INSTITUTION AND ADMINISTRATION:

The H.M.I. is a dependent public hospital of the Ministry of Health regarding the human resources and of the Municipality as for infrastructure and equipment.

The Reformation of Health in Bolivia has been implemented in the axis La Paz, Cochabamba and Santa Cruz, in our Department we don't know it.

The Municipality comes completing fully as for the opportune payment of the benefits of the S.B.S., not like that for the Resources of Popular Participation.

In the Plan of Poverty Alleviation, in the month of April it was endowed to the hospital with the following ITEM:

- 1 full time for Sonogramist
- 1 half Time for Gineco-obstetrician
- 1 half Time for Pediatrician
- 1 full time for licensed nurse
- 1 full time for Aux, nurse

Any coordination system doesn't exist with agencies related with the sector health.

# 4.- HUMAN RESOURCES:

The Endowment of ITEMS on the part of the Ministry of Health is deficit and it doesn't maintain an appropriate relationship yearly with the vegetative growth.

The hospital doesn't have guard's doctors' ITEMS in Gineco-obstetrics, Neonatology, Anestesiology, Traumatology.

With own funds it is paid at thirteen (13) officials to contract.

### 5.- SUPPLY

The assignment of ITEMS on the part of the Ministry of Health, it is managed fundamentally with political approach.

# **DEMAND**

Due to a faulty politics of information to the users of the S.B.S., payment will doesn't exist in the population.

# 6.- MANAGEMENT OF THE HOSPITAL

The hospital for its operation has three (3) financing sources

- a) **OWN RESOURCES:** it Comes from the sale of hospital services, being the main source of financing of the S.B.S.
- b) **CONTRIBUTE OF THE TGN:** as for the payment of salaries to the whole personnel with ITEMS.
- c) DONATIONS.

80% of the Resources coming from the benefit of services to the S.B.S. it is dedicated to the opportune acquisition of medications and consumables settled down by the Regulation of the S.B.S..

# 7.- EQUIPMENT

The hospital was equipped 18 years ago by the Japanese government, at the present time the equipment is obsolete and it has not been renovated.

In this respect it is important to mention that from the promulgation of the Law of Popular Participation it is attribution of the Municipality to equipped to the hospitals, however these are not completed.

The Municipality, included the H.M.I. in the Spanish credit, but the Ministry of Health determined its exclusion of this credit, up to now we don't understand the reasons.

The hospital doesn't have a personnel specialized in the maintenance of medical equipment.

# 8.- MEDICATIONS

An opportune supply and an effective distribution of the medications of the S.B.S is carried out.

# 9.- REFERENCE AND COUNTER REFERENCE

An effective coordination doesn't exist among the different levels of health in our Capital, that is to say the System of Reference and Counter reference doesn't work.

# 10.- HEALTH OF THE COMMUNITY

The hospital has an Auditorium and a training center in which are carried out training courses permanently to develop abilities and dexterities in the human resources that will make promotion and prevention of the health in the community, as being:

- Training to traditional midwives and responsible volunteers of health (R.V.S.)
- Orientation and Promotion to the user in programs of sexual and reproductive health.
- Promotion with material of information, education and communication (IEC) in external consultation and internment rooms.
- Evaluation of the programs of health in coordination with the SEDES AND DISTRICT 01 Trinidad.
- Education and promotion in the program of Maternal Nursing and URO.
- Training of human resources in the prevention of Inside hospital Infections.

# 11.- **SNIS**

The gathering, prosecution and shipment of data of the production of services of H.M.I. is carried out in opportune form, monthly, through the SNIS; nevertheless not to have an appropriate atmosphere and logistical technicial support for the correct prosecution of the information.

# 12.- PRIMARY HEALTH CARE(PHC). -

In the hospital it has been implemented the program of integral attention of illnesses prevalent of the childhood efficiently (AIEPI)

# 13.- EPIDEMIOLOGICAL SURVEILLANCE. -

The program VALA is developed (Surveillance Alert Action) for the immediate notification of illnesses infect contagious.

As last point we should mention that starting from the month of July with the patronage of JICA one comes developing a training program and managerial training dedicated to the Directors of the hospitals of Trinidad, in charge of the Japanese University Hospital of the city of Santa Cruz.

Although it is premature to evaluate the results of this training, we should say that it has already been achieved many advances as for:

- Organization
- Methodology of elaboration of the POA
- Application of Protocols
- Reformulation of Flowchart and Administrative Technical Council
- Quality in the service of health.
- Elaboration of new economic and financial charts
- Monthly Monitoring of activities of hospital administration (Statistic)
- Code of medications according to the National therapeutic form
- Elaboration of the Flow grass in the Unit of Pharmacy
- To enlarge knowledge in maintenances of equipments and possible repairs.

Dr. Jorge Pinto Parada
DIRECTOR
HOSPITAL MATERNO INFANTIL

# PILOT STUDY OF HEALTH CENTER OF NUEVA TRINIDAD

# REPORT OF THE FIRST MONITORING

**JULY 2002** 

# PILOT STUDY OF THE HEALTH CENTER OF "NUEVA TRINIDAD" REPORT OF THE FIRST MONITORING (SUMMARY)

In the first 4 months of work we detect that the groups affected with the illnesses are the children smaller than 5 years highlighting in them:

- Acute respiratory infections (IRA) with incidence of 325/1000
- Acute Diarrhea Infections (EDA) with incidence of 195/1000
- Malnutrition, Anemia and Parasitosis
- The accessibility to our Health Center in what concerns to the location and the time of transfer to the same one is adapted; according to the population's socioeconomic state we have trips for the different customs, beliefs and for the lack of economic resources.
- We obtained a total of 438 consultations of which 132 correspond to the ages from 1 to 5 years and 169 are among 15 to 45 years. We also had 66 dental consultations.

# COVERAGE OF PATIENT OF EXTERNAL CONSULTATION

Coverage	Age	Percentage
First control of growth and development.	Under 2 years	58.8
Repeated growth and development controls.	Under 2 years	13.4
First control of growth and development.	2 to 4 years	12.7
Repeated growth and development controls.	2 to 4 years	3.4
Administration of vitamin A	6 months to 4 years	14.8
Prenatal control	Pregnant women	23.0
Pregnant women with tour prenatal controls	Pregnant women	25.8
Orientation in family planning	Women in	57.3
	reproductive age	

### **PREVALENCE**

Prevalence	Age	Percentage
Malnutrition	Under 2 years	20.5
Malnutrition	2 to 4 years	46.5
IRA without pneumonia	Under 5 years	43.4
IRA with pneumonia	Under 5 years	4.0
EDA	Under 5 years	19.5

- Making an analysis of the obtained results we can say that we will continue working in:
  - Improvement of our Survey/Census according to the age groups and the population, the registration of deaths in the different Local Meetings
  - To increase the number of consultations of healthy patients, by way of being carried out as minimum one control per year in the inhabitants understood among 15 to 45 years and those that have but of 45.

- To increase the number of healthy children's consultations smaller than 5 years with control of growth and development and to achieve a continuity in them.
- To carry out an early reception of the pregnant women and to achieve that they make a minimum of four prenatal controls each one.
- To make a study with depth with respect to the nutritional state of the children smaller than 5 years and to begin the rehabilitation in malnutrition, anemic and parasitosis.
- To be able to cover in 100% the orientation in Family Planning in women in fertile age.
- To elevate the number of new users of birth-control methods and to maintain a continuity in the use of the elected method.
- To promote the use of the condom mainly as prevention of STD in the adolescent youths.
- To diminish our prevalence of Acute respiratory Infections, Acute Diarrhea Infections, Anemia and Malnutrition in those smaller than 5 years (morbility).
- Detection and treatment and prevention of Tuberculosis.
- To elevate the vaccination coverings in the area.
- To detect people with more exhibition to risks to get sick with certain pathologies.

Willingness to pay of the inhabitants: in spite of having precarious conditions of work we have noticed a favorable answer of the inhabitants, as they demonstrate it monthly when the revenues upward.

- We thank sincerely to all the institutions that somehow have made possible the realization of this project, is worth to say:

PREFECTURE: Our gratefulness for the collaboration with the human resources of the study, with the infrastructure and equipment of the office of the project and for the endowment of technical advice.

MUNICIPALITY: we Thank to our Honorable Municipal Mayor's office of the city of the Santisima Trinidad for the assignment of human resources (items), to contribute with the donation of the land for the construction of the new health center and for the improvement of the basic infrastructure of this. We also highlight their valuable contribution with the payment of services of electricity, water and telephone of the current infrastructure.

JICA (International Agency of Japanese Cooperation): we Receive grateful the endowment of the new infrastructure of the health center and the equipment of the same one, as well as to the efficient human resources that work with the project.

SEDES: we also Thank to the SEDES- BENI (Departmental Service of Health) to collaborate with the endowment of items and for the active coordination at level of the service network with the District Health System: Position-area-district-sedes (Model of Administration, Administration and Territorial Jurisdiction of the Strategic Plan of Health).

Dra. Sarah Ivonne Garrón Arias **GENERAL DOCTOR** 

# REPORT TO THE MUNICIPAL TECHNICAL COMMITTEE FROM THE EVALUATION OF ASSIGNED HUMAN RESOURCES TO THE HEALTH CENTER OF NUEVA TRINIDAD, FOR THE OTBS OR JUNTA VECINALS OF TRINIDAD AND CERCADO PROVINCE

The human resources that were assigned by the LOCAL COMMITTEE OF SELECTION to the Health center of Nueva Trinidad, and consequently for their first evaluation in the acting of their functions, as the D.S  $N^{\circ}$  26371 establishes, in their article 13, the community evaluates it in the following way:

### **COMMENT:**

- 1. The neighborhood of Nueva Trinidad, has a population of 2.086 inhabitants at the moment, disintegrated in the Junta vecinal 26 de Enero, Villa Conchita, 21 de Septiembre, La Merced y El Progreso, with a scarce primary health care, existing a lot of morbility.
- 2. The services of health, offered on the part of the human resources assigned to this center are faulty, I motivate that is working in a particular house that doesn't gather the conditions of service of health, considering that most of the users, they don't have knowledge which are the services that this center is lending, also to that they don't give it importance because it is working in a private home.
- **3.** The Prefecture of the Beni, like Departmental Government is looking after the health in the whole Department; at the moment it is supporting to the Health that thanks to the Prefecture counterpart like the Dr. Juan Carlos Sakamoto that is the main promoter and the Japanese Government by means of JICA, based on a pilot study that is developing, in their first phase, it has fulfilled the infrastructure and equipment of the Medical Center in the urbanization Nueva Trinidad of the District N° 6 of this city that later on will enter to work and to offer the population a service of primary health care (family health), study that the Government from Japan is donating.

The SEDES BENI, as institution in charge of looking directly after the population's health; at the moment, it is only fulfilling the PAI and two human resources in this center, the same one that should fulfill a hundred percent in the coordination with all the institutions involving in benefit of health and inclusive with the civil society as junta vecinal, mothers' club, defensoría of the health, etc.

The Municipality like in charge of the maintenance of the services of health, to this center that is working from the month of april/2002, it is fulfilling four items of human resources, expenses that are paid by the HIPC II, an auxiliary nurse and serene porter with resources characteristic of the municipality.

As for the seguro basico de salud, the municipality is not completing for reasons of that coordination doesn't exist and the District  $N^{\circ}$  1 of Health that don't present its monthly reports for the cancellation of the basic insurance.

The Prefecture of the Beni is fulfilling its part, but alone it cannot improve the health, it lacks coordination with the SEDES, causing a bad image before donating countries.

- **4.** The human resources that were assigned to this center by the law, are until the moment satisfactory, but the municipality and the SEDES, they are not coordinating in the sense of providing them, the appropriate material so that they can fulfill the work that that population requires according to their condition.
- **5.** The items that the government settles down for each district of health are distributed in irregular form, not existing coordination among the SEDES, the different services of health and the municipality.
- **6.** The medications with which it should cover the municipality for the seguro basico de salud, they don't exist in this center, for what we have mentioned previously.
- 7. The user's reference exists, but the pursuit of counter reference does not exist on the part of the personnel of health of this center, due to the lack of the work coordinated among the hospital services.
- **8.** The promotion of health to the community, has deficiency in the registration since the human resources, the municipality neither the SEDES are not qualified to provide the necessary means to have coded all the users; neither the training exists on the part of the SEDES, to the human resources of the center, in the promotion of the midwives, responsible for health, in the community. When not existing for both institutions, one has a faulty promotion of health and we are not able to improve the condition of the inhabitants' life.
- **9.** The promotion as for the social participation of the human resources of the health center, is in the middle of development.
- **10.** The human resources that are working the health center of Nueva Trinidad, are the following ones:

# **Observations to the human resources:**

- Dr. Marco Antonio Aponte Larach medical gynecologist, his work is irregular, in the first place, he arrives at hours 9 in the morning and in other cases he arrives at hours 10 in the morning, being that his schedule of attention is of 6 daily hours, what ends up working only 4 daily hours; on the other hand, the mentioned doctor, doesn't make promotion of health in this center, neither he makes domiciliary visits that stops him to be known by the community.
- Dr. Carlos Arteaga Vacates odontologist, his work is efficient and it fulfills his schedule of work.
- Dra. Sarah Yvonne general doctor, her work is efficient, fulfills their schedule of work, she has a lot of interest in promoting the health, promotes the defensoría of the health in Nueva trinidad, but, to the moment she cannot complete her goal because she is not provided with the appropriate materials.
- Atty. Pure Cossío Roca Enfermera, firstly fulfills her schedule of work, it is efficient and dynamic, it promotes and it guides the user, but all its capacity

- cannot also develop because it doesn't have the material that the SEDES and the Municipality have to provide to these human resources.
- Aux. Enf. Gladys Rivers Moreno and Aux. Enf. Dawn Santalla Mamani, is very dynamic people that fulfill its working hours firstly, they fulfill domiciliary visits guiding and promoting the health for the illnesses.
- **11.** The national programs of primary health care, lack coordination among the SEDES, Municipality and Community.

### **SOLVE PROPOSALS:**

- 1. As community we outline firstly, the health is unprotected for the authorities and the solution, is that a combined and direct coordination exists between the community and the authorities, where the one outlines the problems of health that it exists in its community and the other one (government) that it plans and it coordinates the problem of the health outlined by this community.
- **2.** To the human resources, the authorities have to qualify, to provide the whole requirement that they propose in their annual operative plans, so that they fulfill their functions to perform.
- **3.** If a seguro basico de salud exists, the authorities have to fulfill all the national programs, to fulfill the payment from the insurance to the woman and the smaller than 5 years.
- **4.** That bigger help is made on the part of the Central Government to the Municipalities so that they can fulfill the law of Popular Participation N° 1551 and all the dispositions that force to the municipality as for requirements of human resources in health, equipment of the services of health, maintenance of the services, endowment of medications, medical consumables and infrastructure of new centers where it is required.
- **5.** The SEDES, to the moment don't fulfill their goal; it will have to coordinate and to participate with the civil institutions, juntas vecinales, because they are those that know the problem that they suffer; therefore, existing this combined coordination, we will be able to go improving the health, so much in Trinidad, as the whole Beni.
- **6.** That a more narrow coordination exists between the direction of social development and the SEDES BENI.

We thank to the Prefecture, to the Dr. Sakamoto that was together with the junta vecinales was fighting unfailingly to defend the health and this study, to the Municipality and JICA like donating country, to have put the look in the most important thing as it is the health and we hope this continues to improve the infantile maternal morbi-mortality and the quality of our inhabitants' life.

Sincerely,

Justino Ballejos Sánchez PDTE. OTB 26 DE ENERO PDTE. DISTRICT N° 6 Bernardo Ardaya Ortiz PDTE. OTB 21 DE SEPTIEMBRE

4.1.4

CS Santísima Trinidad

# SUMMARY OF THE EVALUATION REPORT OF THE HEALTH CENTER OF SANTÍSIMA TRINIDAD

**JANUARY-JULY 2002** 

# EVALUATION REPORT OF CS SANTISIMA TRINIDAD. TRINIDAD , JANUARY JULY ,2002

The permanent dialogue with the inhabitant of each community about the importance and urgent necessary of a firm change in the form of health attention, woke up a lot of interest and enthusiasm in each one of the community people; stiller if the support came from JICA and of the counterpart team for the syudyon the prefecture of the Beni.

# 1) General Health Condition

The most frequent illnesses in the area are:

- 1 Acute Diarrea Illnesses(EDA)
- 2 Acute Breathing infection (ANGER)
- 3 Intestinal Parasitosis (extra and intra).
- 4 Malnutrition in younger as in older
- 5 Malaria
- 6 Leishmaniasis
- 7 Cause of mortality for snake bite.

# 2) Coverage

The area of Santísima Trinidad de Moxos has a very dispersed population. They carry out constant visit to the nearest communities it only arrives in vaccination campaigns. For these activities has a boat and an outboard motor.

The coverage , in the populated center of Santisima Trinidad is high, contrary to the dispersed areas for the problems of accessibility and the lack of the municipality of Sam Ignacio de Moxos , the lack of support staff and finally because two communities were isolated by the deviation of the Ichoa river . However the new system of attention in the whole TIPNIS is in validity at the moment , by means of which all the communities that have radios will in radical connection twice a week for 1 our. Coverage especially in the children and women in fertile age.

100% of the women of the area count with Health Insurance

# 3) Human resources

Next the assignment of resources is shown for the area.

# Human resources of the area of Santísima Trinidad de Moxos

ITEM	NAME	INSTITUTION	ALLOCATION
			DATES
General doctor	Dr. Gualberto	SEDES BENI	01-07-1997
	Fields ortuño		
General doctor	Dra. Sonia Moral	SEDES BENI	02-01-2002
	Alcocer		
Dentist	Dra. Lucia Quispe	SEDES BENI	02-01-2002
	González		
Licensed Nurse	Gumercinda	SEDES BENI	01-01-2000
	Meneses		
Aux. Nurse	Juan of god Moye	SEDES BENI	27-03-1992

	yuco		
Aux. Nurse	Carmen Moral	SEDES-BENI	02-07-2001
	Walnuts		
Aux. Nurse	Graciela Ojopi	SEDES BENI	01-01-2000
Aux.Nurse	Carlos Fabricano	H.A.M.S.	21-03-2002
	Moye	Ignacio	
Aux. Nurse	Rosario Rossendy	H.A.M.S.	21-04-2002
	VIRUEZ	Ignacio	

# 4) Sharing Cost

So far with the budget of the Basic Insurance of Health we ended up covering the population's 52%<of 5 years (478), and 24% of women in fertile age (732).

All the families will contribute 10 Bolivians, whose gathering will be for the purchase of medications of rotational fund, for those that don't have Basic Health Insurance or are not inside the program, whose economic resources will be administered by the Committee of health.

Regarding the medical consultation it will charge 5 Bolivians for maintenance of the CS and to cover other demands, resources that the same as the rotational fund will be administered by the mentioned Committee.

# 5) CS administration

The discharges corresponding to the Basic Insurance of Health are carried out before the Health District 2 and the Municipality of San Ignacio. The control is carried out with prescription books, invoices and a daily book of entrance and expenditure of the inventory of medications with its respective expiration date. All delivery of medications is carried out by means of meticulous explanation of the product.

# 6) Equipment

The precarious sanitary post with scarce equipment has lent health services to the whole TIPNIS during 5 years.

The recently built health center consists of a medical clinic, dentistry, pharmacy, laboratory, delivery and recovery rooms, kitchen, bathroom, and a shower for patient, besides bedroom for the health personnel with its respective basic services. The drinkable water will be given by the community in the month of October with the Catholic parish priest healp.

# 7) Medications

The Committee of health will take the position of the handling and administration of the resources coming from medications of the Basic Insurance of Health, of the rotational fund and of the consultations.

# 8) Referral system

The CS of Santisima Trinidad maintains normal and permanent relationship with the near CSs, as being Villa Tunari, Shipiriri. It also keeps relationship with superior levels as being the German Busch and Materno Infantil hospitals in Trinidad.

# 9) Community Health

In the month of April the first visit to the riverside communities of the river Isiboro, Ichoa and Moleto was carried out. In community meetings, chats were offered on different

topics, a mothers club was organized in different communities, which include the responsible for health and the midwives.

A vaccination campaign, another of fumigation against the malaria was also carried out. House visits are carried out providing advice and medical and dental attention.

#### 10) SNIS

In the year 2001 the personnel of the existent health center carried out a training on the handling of the forms of the SNIS. To the moment the information is sent to the health district. Bring up to date is required in the topic of the whole personnel and a system of on-line handling of information.

#### 11) Primary Health Care

The health personnel was qualified at the beginning of the year 2001 in the integral attention of prevalent illnesses of the childhood (AIEPI), they also received training in immunizations.

The health unit offers integral attentions privileging to those smaller than 5 years and to the women in fertile age. The main programs are developed proposed by the Ministry of Health.

#### 12) Epidemiological Approach

In the area of Santisima Trinidad there are not buds of immune preventable illnesses, there are cases of malaria (0.3% equivalent to 11 patients) and leishmaniasis in sporadic form.

### GENERAL HEALTH CONDITION IN THE AREA OF SANTÍSIMA TRINIDAD DE MOXOS

- 1. The good intentions of this project benefit to communities that really need it, because up to today we can see the achievement of this support. But even more when seeing the construction of the micro-hospital in Santísima Trinidad de Moxos that is so much nedeed for this sector.
- 2.In spite of the fact that we already count with auxiliary nurses this doesn't mean that we are covering to all the communities, we as community people see that we are many communities and that the existent personnel is very little, for what we require more personnel in health and infrastructure.

That the personnel assists us with frequency and not only in vaccination campaigns and we also want that the Insurance of Health enters in validity for that our sector lacks economic resources.

- 3. San Ignacio-s municipality is not fulfilling their population since it doesn-t have constructions of sanitary posts neither of schools, maybe for the lack of knowledge of their territory, for what we request that it visits to the communities so that they see the reality in which we live.
- 4. One has very little human resources, reason why they don-t end up covering in their entirety to the whole area, for this reason it is necessary besides implementation of more personnel of health, our people-s training so that they serve in our isolated communities.
- 5. The lack of essential medications, makes that the illnesses are increased, for what is important besides intensifying the seguro basico de salud, to implement the system of revolving fund in all the communities of the TIPNIS.
- 6. The communication radial system is 2 times per week with the personnel from Santisima Trinidad it guarantees us the appropriate handling of the medication and a bigger knowledge of the different illnesses, for what we are sure in the future that we will have a healthy population.
- 7. That the personnel is qualified in constant form so that they assist us with efficiency.
- 8. We are happy with the construction and equipment of the health center of Santisima Trinidad since although the communities are dispersed we will be able to arrive to this center for the respective treatment.
- 9. The purchase of medications with the revolving fund will be of enormous benefit for our communities.
- 10. In the hospitals we want that the illnesses of graveness are assisted in their entirety taking into account our economic situation and origin, that if we arrive we don-t know either where to lodge.
- 11. That the personnel of health has bigger communication equally with the midwives of each community with the quack doctors and others that participate of the traditional medicine. So that they feel satisfied and break the cultural and economic social barriers.

12. As for the nutrition we want that our feeding form is maintained with what we have in our communities but we require bigger orientation.

Of more importance it is the micro credit that will benefit our towns since we don-t have where to appeal mainly in the event of illness in distant communities of the health center.

We are also organized in all the communities in the OTB and mothers club what is of much importance for the advance of the study.

13. That there is course of training of RSP, then midwives and personnel of health in a constant way to improve the community health.

We thank the Prefecture Study Team and the JICA Study Team, who will help us enhance the health of inhabitants in this community.

Rigoberto Fa;io Rossendi VICEPDTE. DEFENSORIA DE SALUD Maria Velásquez Gonsales VICE/PDTA. CLUB DE MADRES

### SUMMARY OF THE EVALUATION REPORT OF THE HEALTH CENTER OF SANTÍSIMA TRINIDAD OF JANUARY/JULY/2002

The area of Santísima Trinidad, has a very dispersed population for what the arrival to this communities is only carried out in vaccination campaigns, except to the nearest communities where constant visits are carried out that however the imposible thing is made to attend most of the communities and with the available means of the place, not always in a motor overboard. It hurts that we don't have a filming camera to show the reality of what one lives in the work field, to show the efforts of the health personnel that however all we carry out in the best way because that is our proffesion the one of stiller serving the neighbor deprived people who are in that area.

Summarized in the following activities.

House visits where we teach of different health Topics imparted which we consider of a lot importance because we will be able to eradicate many illnesses, among the imparted topics are the following ones:

Importance of these immunizations and their risks of not being vaccinated

- Malaria their risks and their form of prevention
- Rights of the childhood and the woman
- Family planning
- Orientation of illnesses of sexual transmission, special focus of AIDS
- Married fidelity
- Cancer
- Tuberculosis
- Use of the water
- Parasitosis
- Prenatal control
- Maternal nursing
- Alcoholism
- Drug addiction
- Risk of use of street medications and self –medication
- Construction of latrines
- Elimination of landfills
- Canine and human rege
- Hipertiroidism
- Contamination of the environment
- Risk of consumption of foods canned with expiration date
- Dental control and their forms of prevention of dental cavity

Among other activities, municipality and family in different meetings, as well as teaching of health in schools, also extended to the teachers in different communities, community organization with formation of mother club, OTBs and defensoría of health.

At the present time, it has Changed the situation of the inhabitant s of all the communities of the TIPNIS and very especially of Santisima Trinidad, since in the same

Ones the family health is fulfilling the arrival from the health personnel to the homes with promotion and prevention of illnesses.

My special gratefulness to the prefecture Study Team, SEDES BENI, Municipality of San Ignacio of Moxos, PROSIN BENI and especially to the JICA Study Team, for the great contribution to the health in the construction and equipment of the Micro hospital of Santisima Trinidad, better days wait for that blow winds of prosperity in health that will extend to the whole TIPNIS and the Beni in their entirety.

Trinidad, August 8 2002

Dr. Gualberto Campos Ortuño DIRECTOR AREA SANTÍSIMA TRINIDAD

4.1.5

Medical Boat

## SUMMARY OF THE REPORT PILOT STUDY OF CARITAS TRINIDAD

**JULY 2002** 

## SUMMARY OF THE REPORT OF THE PILOT STUDY OF CARITAS TRINIDAD - 2002

#### **INTRODUCTION**

Carítas Social Pastoral is an institution of social action and humanitarian attendance of the Apostolic Vicariousness. 40 years they have been working in this Department in benefit of the neediest, at the moment it is working in some Projects, as the Medical Boat in the river Mamoré, Health Center of Pompeya, Solidarity of the Good Samaritano and the Center of Promotion.

The activities of Health began due to the flood of the 1992 that left the riverside families in the poverty. Cáritas Beni went in our siblings' aid in the riverside of the river Mamoré and from then on it comes developing programs of health by means of a sanitary boat or medical boat. The programs of health that are executed are:

- Integral attention to the woman in fertile age
- Integral attention to the boy smaller than five years
- Seguro Basico de Salud.
- Attentions in STD.
- Control of prevalent infectious illnesses (malaria, TB, leishmaniasis, etc.)
- Dental Attentions
- Actions of IEC. in the programs already mentioned

In answer to the order of the government of the Republic of Bolivia, the Japanese agency for the international cooperation (JICA) sends a study team the 2001 in the first study phase that consists in:

- Analysis of the existent economic conditions and of the demand and supplies of the health services.
- Formulation of the Master Plan of regional system of health and the plans of improvement
- Selection and identification of programs for the pilot study

The JICA study team and that of the Prefecture includes the boat of Cáritas for the pilot study.

#### I. – GENERAL HEALTH CONDITION

As a consequence of the extreme poverty, precarious housings, accumulation, lack of basic services, difficulty in the accessibility to the health services and the geographical characteristics increase the prevalence of different illnesses in this area like: the EDAS, IRAS, parasitosis, malnutrition, anemia, rheumatism, illnesses of the skin (micosis, piodermitis and sarcoptosis)

#### II. - EXPANSION OF THE COVERINGS OF THE HEALTH SERVICES

The Route of the Boat Cáritas is starting from the mouth of the Ibare until the community of Vuelta Grande located in the river Itenez. The population with which it works belongs to 4048 inhabitants belonging to 34 communities that correspond to 5 Municipalities (San Javier,

Santa Ana, Exaltation, Puerto Siles and San Joaquín) and 3 Health districts (Trinidad, Santa Ana and San Joaquín).

#### II. - INSTITUTION AND ADMINISTRATION

The conformation of the Technical and Steering Committees has allowed to consolidate the wide participation of the municipalities, in search of achieving the sustainability, union for the improvement of the benefits of SBS and invigoration of the regional system of health. Cáritas Beni signs agreements with different Municipalities that are in the area of the project.

#### IV. - HUMAN RESOURCES

Cáritas Beni has come developing the work with the Medical Boat with its own economic resources and resources of international organizations as USAID, CRS, PROCOSI and others. At the moment it is had the support of the Municipalities, EXTENSA, TGN for the payment of salaries to the personnel.

#### V. - SHARED COSTS

Starting from the signature of agreements with the Municipalities for the SBS, they commit to give a drum of Diesel to support with the operative expenses of the Boat, Also PROSIN Beni gave its support for operative expenses of the year 2001, committing its participation for the 2002 when it consolidates the continuity of the work of the Medical Boat.

#### VII. - UNITS OF EQUIPMENT

The infrastructure of the boat and their equipment financed by the Japanese Government will allow to improve the quality of attention, there being an enormous difference with the old boat.

#### VIII. MEDICATIONS

The medications of the Seguro Basico de Salud are billed to the different municipalities according to the benefits carried out in each trip. For the rest of the medications the work form is to maintain a pharmacy with revolving fund. The easiness that is given to the community people is that they received products by means of paying for the medications. In some extreme cases the medications are donated. The recovery of the total value is approximately from 70 to 80%.

The communal first-aid kits work in a same way, that is to say paying with products for the medications.

#### IX. – REFERENCE AND COUNTER REFERENCE

Habitually the supply of the consumables and forms are carried out directly by SEDES, due to the permanent lack and the distance of the Health districts.

The serious cases are transferred to the reference hospitals but one is not given counter reference of the same ones. It is aspired to achieve a more effective coordination with all the Health districts.

#### X. - COMMUNITY HEALTH

In the indefatigable work of improving the conditions of the residents' of the communities life, the necessity was seen of qualifying volunteers of Health and the midwives, selected by the same community people.

The work of the promoters is from support to its community, considering that our health service is transitory for the communities, in that time they are a valuable instrument to capture all the problems of health of its community.

Trying to standardize the educational content for the promoters, a committee of IEC has settled down in the city of Trinidad advised by PROSIN and PATHFINDER with the objective of introducing them to the network of health services.

#### XI. - SNIS

Before we informed directly to District 1 complicating the coverage of other areas this way, today we submit the SNIS to each corresponding area or district.

#### XII. – PRIMARY HEALTH CARE

An important part of the work of the Medical Boat is to qualify to the community in diverse topics of integral attention, using different methodologies, Videos, Marionettes, games, fairs of health etc.

#### XIII. – EPIDEMIOLOGICAL SURVEILLANCE:

The team of Cáritas is part of the system of epidemiological surveillance informing with the weekly form.

#### **COMMENTS**

Pastoral Social CARITAS Beni delights in participating in the project of the fluvial Network of services of the National system of Health. Thanks to the invigoration of the JICA pilot study we maintain the hope of giving continuity to the benefits of health in the riverside of the river Mamore along ten years. We hope this new stage that we begin will largely allow to improve the benefits of health and its elevated quality of the riverside residents' life.

The changes achieved with the new infrastructure, equipment of the Medical Boat, more stable Items, and the trainings proposed by the plan of JICA motivate the personnel to offer better quality of services in health

The commitments achieved with the Municipalities, Prefecture, TGN, EXTENSA, SEDES BENI, PROSIN and CARITAS, will allow to integrate to the Medical Boat the network of services of the National system of Health. We applaud the initiative of JICA of financing the construction of the new boat, since the previous one was already obsolete. The property of the boat will be of the Prefecture what will allow a main protagonism in the state institutions, being from now on an institution integrated to the Fluvial Network putting its tally until the state institutions, it is worth to say, the municipalities assume its total responsibility in what refers to the operation cost of the boat.

Given the work conditions in which the personnel of CARITAS is developed our request is for you to consider the possibility to provide us of a computer that will allow us a better development in the work of reports.

We thank the concern of Miss Maki Tanaka JICA Beni when she went to Mamore river to support on the survey work to women and children younger than 2 years. This way seeing the reality of the families, she worries about the delay in the endowment of the Items and she moves to the city of La Paz to face the situation and she is able this way to consolidate the commitment on the part of EXTENSA.

We thank to the JAPANESE GOVERNMENT, to the Team of JICA for the advice and support toasted to the Beni for the improvement of the system of Health, we hope not to defraud the trust deposited in the institution of CARITAS administrating the Boat.

## SUMMARY HEALTH PROMOTERS OF THE MAMORE RIVERSIDE REPORT, TRINIDAD, BENI 2002.

The communities that are assisted or benefitted by the Ship of CARITAS are 34 corresponding to the municipalities of San Javier, Santa Ana, Exaltation, Puerto Siles and San Joaquín. These are: Mangalito, San Renato, Villa el Carmen, Villa Chica, Bambuces, Tejerias, Toboso, Mapajo, Soberanía, 24 de Agosto, Navidad, San Miguelito de Cuellar Rampla, Ipimo, Bella Flor, San Jorge del Mapajo, 18 de noviembre, Buen Día, Carnavales, 20 de Enero, Exaltación, Villa Nueva, Puerto Santiago, Trompillo, Puerto Siles, Altura el Carmen, Cooperativa, Peñitas de Nazareth, Lago Bolivar, Villa Jesus de Nazareth, Santa Rosa de Vigo, Alejandría, Monte Azul and Vuelta Grande

The communities that are in the riversides of the river Mamoré are very dispersed and far from the capital cities, our housings are precarious, we don't have necessary basic services, most of the families have 7 children; conforming the family for an average of 9 people.

Most of the inhabitants of our communities are poor for lack of roads, means of transportation and markets for our products.

The conditions of our health are very faulty, for the level of poverty in that we live and for factors already mentioned. The illnesses that we suffer in our area are: cold, diarrheas, vomit, cough (pneumonia), parasitosis, malaria, anemia, malnutrition, rheumatism, urinary track infections, high pressure, remasalada (micosis), chicken pox (confused with pock), puchiches, arraigón and diabetes, etc.

The posts and the existent hospitals in our municipalities are not accessible for all the communities and when we go to them many times the necessities cannot be solved by the medical personnel's lack of appropriate equipment, essential medications and necessary material.

On the other hand, we are visited by the medical ship of CARITAS and the ship of the Navy. The ship hospital of the Navy, only carries out visits twice a year, the personnel that assists is changed in each trip, during the journey it doesn't assist to all the communities and it remains little time in each community, reason for which not all are benefitted by the services that they lend. However the ship of CARITAS, carries out its journey from 5 to 7 times a year, the attentions that it carries out are house to house visits, the personnel that assists is permanent and the type of attention is good because they know our customs and necessities; for such a reason we trust them.

The CARITAS boat offers the health attentions with SBS in all the communities which is of great help for the poor families.

As for the benefits of the services in the hospitals of our municipalities we have the difficulty of being assisted with the SBS because they tell us that we are of CARITAS.

The health promoters have been chosen by our community, most of us have a basic study for such a reason we need training in health to lend better services. In the years that CARITAS have visited us we have been qualified by them to carry out the promotion of health and the first aids in the event of illness with basic medications that we have in our first-aid kit.

Regrettably the health promoters cannot participate in the CAI's because we are not taken into account by the districts.	,

## Own Evaluation Report on Pilot Study Second Monitoring

4.2.1

Hospital Presidente German Busch

### **REPORT**

# SECOND MONITORING OF GERMAN BUSCH HOSPITAL

**NOVEMBER 2002** 

#### REPORT: SECOND MONITORING OF GERMAN BUSCH HOSPITAL

The German Busch hospital in this second monitoring stage, has presented some changes, many of them as a process of continuity of the previous time among which we indicate:

The hospital is part of the referral system of 2<sup>nd</sup> and 3<sup>rd</sup> level with resolution capacity of the pathologies that are presented according to the possibilities that we have, remembering that there are human resources that are sub-used due to equipment lack.

The patients that attend, independently of the sex, are people older than 12 years old for hospitalization and emergencies; in the event of specialized consultations and urgencies, the same ones are made for any age transferring the minor and the gyneco-obstetrics illnesses carriers to the Infantile Maternal hospital.

The assisted population's coverage has not been identified, we are based in previous statistics as in the last report; however, the interest exists ,in short term and with appropriate people, to carry out a correct registration.

The causes of morbi-mortality, are relatively the same ones; however, we have registered more concretely the patients that attend because we have improved and implemented simpler registrations and personalized books for each medical professional, daily registration of hospitalized patients, radiology, laboratory and of all the sections, taking a better statistical report as a result. However, in this last time strikes and holidays have taken place hindering the normal operation of our hospital, where the statistical results are the following ones:

- ❖ In relation to the POA, a training has been carried out with all the representatives of the sections for the orientation and realization of the same one whose results are those that are attached.
- ❖ Due to government's change some disturbances have taken place in the normal development of the hospital, many of them for abuse of functions of some workers and movement of personal with a worker's definitive retirement and the suspension of three professionals for political reasons, what causes uneasiness and certain distrust which rebounds in the work.

Another political problem is the inherence of the unions that with support of some political parties are attributed functions that do not correspond them, hindering the right true function of the workers which is expressed daily.

❖ When we speak of the medical personnel with respect to their working hours, as we expressed it in other opportunity, almost all have half time what would correspond to 3 hours per day from Monday to Friday, that is to say 15 weekly hours. Due to the necessities we reached an agreement where the same ones cover emergencies on holidays, external consultation and hospitalization, but their daily regular attendance is of 2 hours per day. As for the doctors of full time, they are guard doctors that complete twice as much or more than their hours due to lack of personnel, without giving them nor holidays neither Sundays which is established in the medical statute. The other full times are the anesthetists and two surgeons which are also working excessively since they have passive guards of 24 hours to carry out.

- \* Regarding the service chiefs ,their conditions are like in the previous report, since they work with responsibility and obligation without any economic recognition neither of time, because they occupy base items.
- ❖ As for nursing we have the execution of the same ones with lack of personnel and of training in some services
- ❖ The logistic service works in normal form usually poorly incentivated by the age of the same ones and the illnesses that they suffer, what harms the institution largely, recalling that the same ones were entered previously and one at the moment product of the politics and work inheritances that formerly took place without caring for the necessities of the hospital and that it has hindered me to suppress it.
- The administrative personnel has a lot of privileges because they ended up occupying this positions most without papers that justify their capacity; it is because of that when one wants to make rotations or improvement of their functions, it is hindered because of what was mentioned before; however, some workers have the will and the desire of change and improvement for the hospital. To overcome this it has been spoken with the director of the SEDES-BENI to carry out the personnel's evaluation where the result is to improve the same one or to redistribute the personnel according to its capacity and necessity of the hospital, needing for it the support of the different authorities and its backing to the moment of the decision making (it is frequent that in this type of activities it is not had support and in most of the cases it is just the opposite).

The financial states of our hospital are shown in the attached table.

- ❖ The received contribution of the training of the Japanese hospital of Santa Cruz to the personnel that attended is expressed in changes; with the advantage of being made in a more regular basis and improving to the same such as: more regular Technical Administrative Council; regular reports of the different sections are carried out, donations procurement, personnel control, agreements with institutions for better collection are carried out, training courses are organized, health control to the workers, the hire of work personnel is conscious and ruled which should be based on merits competition and exam, we control that the norms emanated from the direction are applied, we have good relationships with the Mayor's office ,Prefecture and SEDES to fulfill the objectives of the hospital.
- ❖ The pharmacy has had some problems for the training of the personnel that works in the same one; however, the centralization of economic reports has been achieved, schedule of attention of the pharmacy and coordination with social service.
  - The purchase of medicines is made according to the necessities that are presented, directly from suppliers when these cover the necessities, remembering that the committee that should constitute for the same one was not carried out.
- ❖ In the administrative field we continue with the daily census of patients and personnel, the monthly reports of all the services, managing the economic resources with checks, control of books with more frequency, daily deposits of the revenues, purchases bigger than the inputs to lower prices and according to justified orders with application leaf, all the

revenues are centralized in the central warehouse for further control, a physical space is built so that the warehouse has better work conditions, all registered under Kardex.

We had some problems for lack of the personnel's training making it an obligation to hire others to fulfill works required by our own or other institutions.

The few medical equipments are repaired by the ones in charge of maintenance according to their few knowledge, needing a technician with more knowledge to repair more sophisticated equipments such as the tomography equipment and X ray equipment that begins to be in use in next days.

❖ The referral system have settled down in a more regular form when patients that should go to the city of Santa Cruz are assisted, it is poorly done in our department in spite of having the papers and the indications due to a lack of conscience.

Trinidad November 20 2002

## 0-3

#### 1. HOSPITAL ADMINISTRATION INDICATORS MONITORING

#### ADMINISTRATION UNIT: "GERMAN BUSCH" HOSPITAL

				<b>YEAR: 2002</b>
0	N T	Н	S	

A 4 4 4 7 T T 4	MONTHS												
Activities/Indicators	January	February	March	April	May	June	July	August	September	October	November	December	Goal
Efficiency													
Bed total	1550	1400	1550	1500	1550	1500	1550	1550	1500	1550			
Daily occupied beds	852	749	870	848	707	612	670	860	725	931			
Daily available beds	50	50	50	50	50	50	50	50	50	50			
% occupation	55	53.5	56.1	56.5	46	41	43.2	55.4	48.3	60			
Hospitalization days percentage													
Outcome total	174	152	163	192	201	161	236	208	191	210			
Medical discharge	152	116	131	169	154	131	205	169	145	164			
Solicited discharge	12	22	19	13	24	20	20	22	19	23			
Deaths	4	4	4	3	10	5	4	7	3	4			
Escapes	2	4	2	2	5	5	5	6	3	3			
Support services													
N. of Lab tests	536	242	547	532	499	412	924	645	559	549			
N. of ultrasounds	28	21	23	21	29	19		24	25				
N. of X ray studies	200.5	181	156.5	220.5	227	128	242	196.5	138				
N. of Papanicolaou													
No. Histo-pathological studies													
N. of dispatched prescriptions													
													<u> </u>

## 0-3

#### HOSPITAL ADMINISTRATION INDICATORS MONITORING

**YEAR: 2002** 

#### ADMINISTRATION UNIT: "GERMAN BUSCH" HOSPITAL

A 57 31						M O	N T	H S					
Activities/Indicators	January	February	March	April	May	June	July	August	September	October	November	December	Goal
Performance													
N. of New consultations	551	394	385	645	627	491	949	745	674	677			
N. of Repeated consultations	35	24	33	49	64	34	25	65	49	27			
Consultation average time													
N. Hours/doctor hospitalization													
N. Hours/doctor consultation													
N. Consultation/hour doctor													
Working days total													
Worked days total													
Rationing													
Surgeries total	46	47	52	47	52	39	96	66	39	60			1
Mayor surgeries total	33	22	16	24	12	11	41	20	12	29			
Surgery/day average	1.4	1.6	1.6	1.5	1.6	1.3	3	2.1	1.3	2			
Support services use index													
N. Lab exam/outcomes													İ
N. Histo-pathological studies/													
utcomes													<u> </u>
N. X ray/outcomes													
Epidemiological surveillance													
% hospital infections													
HIV+ cases													
Cases											_		
													1

## 0 - 3

#### HOSPITAL ADMINISTRATION INDICATORS MONITORING

**YEAR: 2002** 

#### ADMINISTRATION UNIT: GERMAN BUSCH HOSPITAL

						M (	) N T	H S					
Activities/Indicators	January	February	March	April	May	June	July	August	September	October	November	December	Goal
Financing management													
Previous month balance	3298.59	5162.23	9517.34	10802.73	16161.60	12778.79	13032.82	36089.33	55636.51	61923.64			
Income by service supply	31931.50	31193.06	37661.00	34463.50	33060.50	30375.00	56142.80	62382.00	38726.20	62806.70			
Income by TGN	230827.20	231326.00	231720.00	231680.80	231720.00	231680.80	231766.80	232506.30	233725.50	231826.80			
Income by SBS													
Income by Municipality													
Income by Agreements													
Income by other concepts									10995.00				
Small box opening	2000.00												
Outcome for consumables buy	13995.66	9625.70	23371.51	15330.63	22637.66	13042.72	21778.04	29015.72	20013.37	12348.66			
Outcome for equipment buy		370.00						510.00	5744.00	1200.00			
Outcome for personal services	236197.20	239526.00	236900.00	237060.80	236852.00	242320.80	237366.80	238495.30	244466.50	234592.80			
Outcome for non personal services	1136.00	335.00	881.00	791.00	940.00	723.00	464.50	476.50	2086.80	1346.20			
Outcome for food intake	7566.20	8307.25	6943.10	7603.00	7733.65	5715.25	5243.75	6843.60	4848.90	7960.55			
Outcome for diminishing payable										735.79			
debts													
Outcome for multas										3279.00			
Debts to pay	14287.50	7425.00	7532.95		7651.20					12813.11			
Debts to collect	42421.00	52845.00	32729.00	5301200	38360.50	72188.00	74392.00	56497.00	59647.00	36413.50			
Availability (Balance)	5162.23	9517.34	10802.73	16161.60	12778.79	13032.82	36089.33	55636.51	61923.64	95094.14			

4.2.2 Hospital Materno Infantil Dr. Jesus Vargas

REPORT
OF
DR. JORGE PINTO PARADA, DIRECTOR
OF
THE BOLIVIAN JAPANESE MATERNO INFANTIL HOSPITAL
IN RESPECT TO THE WORKSHOP
ON
EDUCATION AND TRAINING REALIZED BY
THE JAPANESE HOSPITAL
IN
THE CITY OF SANTA CRUZ

**NOVEMBER 2002** 

#### REPORT BOLIVIAN- JAPANESE MATERNO INFANTIL HOSPITAL TRINIDAD – BENI –BOLIVIA

1.- The Bolivian Japanese Materno Infantil Hospital.

The Bolivian Japanese Materno Infantil Hospital, assists the binomial mother-child in the city of Trinidad, with a population of 82.000 inhabitants, it is a departmental reference hospital in Beni, with a population of 362.000 inhabitants.

- It has 70 beds:
- 30 in Pediatry
- 30 in Gynecology and Obstetrics
- 10 in Neonatology

It depends on the Ministry of Health in what refers to human resources and on the Municipality of Trinidad in what refers to infrastructure and equipment.

It offers: Integral care services to the women in their pre-delivery, delivery and post-delivery phases, and to the childhood and adolescence in prevention, reparation and rehabilitation of health. We also offer orientation in sexual and reproductive health.

It is also an educator of human resources through the education in specialty in Gynecology-Obstetrics and Pediatry.

**2.- Annual Operative Plan (POA).-** The POA 2003 has been elaborated in the different hospital services: Pediatry, Gyneco-Obstetrics, Neonatology, Surgery Room, Main Warehouse, Administration, Accounting, Nursing, Laboratory, X Rays, Pathology, Ecography, Statistics, Food Intake, Nutrition, Economics, Maintenance, Clearing and Medical Residence.

The procedure of this work was made through methodology workshops on the elaboration of the POA, in the hospital and also in the workshop in "La Hosteria" Hotel.

- **3.- Financial State of the Hospital.-** Annex attached.
- **4.- Results/ Effectiveness.-** Mortality-Morbility Charts attached.
- 5.- Data gathering/ processing.-

Administration sub-system: Thanks to the cooperation of the Canadian Society for health, the donation of a complete computer and a Network System in the Direction, Secretary, Administration, Accounting and Statistics has been done. Apart from the implementation of an Integrated Information System that allows the determination of the income generated by services or cost centers and the processed information by the Statistics Service.

**6.- Management and Operation.-** We attach a report of this Direction to the Japanese Hospital in Santa Cruz.

#### **7- Future Requirements:**

(see annex : M.I.H. Requirements)

#### 8.- Medicine distribution and use:

Medicine provision by the SBS.

The acquisition is made through the different local distributors, according to the recommendation of the Health Ministry and the financing, it is through the support by the municipality paying the services of the SBS that are offered by the hospital.

Institutional Pharmacy: The medicine supply is done through the Medicine Acquisition Committee with funds from the revolving fund.

The buy is ruled by the basic medicine list.

- **9.- Referral system.-** In our town, this system does not work because of lack of efficiency from District 01 and SEDES.
- **10.-** In our hospital the following programs are under execution: IMCI, ARI, ORU (Oral Rehydration Unit), PAP Test, sexual and reproductive health, breast feeding promotion.

Trinidad, november 2002

Dr. Jorge Pinto Parada
DIRECTOR
HOSPITAL MATERNO INFANTIL

## REPORT OF DR. JORGE PINTO PARADA, DIRECTOR OF THE BOLIVIAN JAPANESE MATERNO INFANTIL HOSPITAL, IN RESPECT TO THE WORKSHOP ON EDUCATION AND TRAINING REALIZED BY THE JAPANESE HOSPITAL IN THE CITY OF SANTA CRUZ.

Starting on the month of June, under the sponsorship of JICA and directed by the Japanese Hospital in Santa Cruz, we have been working on the education and training of executives and personnel from the Materno Infantil Hospital.

In June of the current year, we had the visit from personnel from the Japanese Hospital: Dr. Carlos Dabdoub, Executive Director, Lic. Hugo Ribera, Administrative Director, Dr. Eidy Roca, Planning, Dra. Beatriz Sulzer, Pharmacy Superviser, and Ing. Carlos Vélez from maintenance, who realized an evaluation of the main necessities and deficiencies of our hospital.

After, personnel from this hospital, went to an Education and Training Workshop in the city of Santa Cruz for one week (July 8 to July 13) in the Japanese Hospital.

In later visits we have been evaluating the progress of the work done. To this date the Materno Infantil Hospital, reports the following results of the executed tasks:

#### 1.- ORGANIZATION:

We have re-structured the Organization Chart of our Hospital, base don the Lineal and Staff Model, incorporated to the Counseling Committees. (See attached chart).

We have formed the in hospital committees.

#### **CLINIC HISTORY AUDIT COMMITTEE**

\* Dra. Carmen Rodal de Chávez

\* Dra. Amanda Moreno Cuellar

PEDIATRICIAN

GYNECOLOGIST

#### MEDICINE ACQUISITION COMMITTEE

\* Dr. Jorge Pinto Parda DIRECTOR

\* Lic. Ramiro Lopez Gómez ADMINISTRATIVE MEDICAL CHIEF

\* Dra. Ma. Antonia Costales Fernández PEDIATRY CHIEF \* Dr. Eduardo Alí Jiménez GYNECOLOGY CHIEF

\* Michela Montenegro PHARMACY RESPONSIBLE

#### PROFESSORS COMMITTEE

\* Dr. Jorge Pinto Parada DIRECTOR

\* Dra. Carmen Arce Toro PROFESSORS CHIEF

\* Dra. Ma. Antonia Costales Fernández PEDIATRY CHIEF

\* Dr. Eduardo Alí Jiménez GYNECOLOGY CHIEF

#### **QUALITY COMMITTEE**

- \* Audrey Viveros
- \* Dr. Sergio Rivero Parada
- \* Volunteer
- \* Dr. Jorge Arteaga Ribera

#### BASIC HEALTH INSURANCE COORDINATION COMMITTEE

- \* Maria Julia Heredia
- \* Dr. Martín Ytalo Pecorari
- \* Dr. Celín Gómez Mendoza
- \* Dra. Rosario Barrón Aramayo
- \* Dra. Miriam Vélez Chávez

Based on this organization chart we have formed the Technical Administrative Counsel, establishing ordinary meetings every Tuesday of the first week of each month and extraordinary meetings when is necessary.

#### 2.- FUNCTIONS MANUAL

Based on the functions manual elaborated by the Planning Unite of SEDES – BENI we have distributed all the personnel.

#### 3.- CLINIC PROTOCOLS

With the finality of ruling all the treatments, we have elaborated the clinic protocols for the more frequent pathologies in the departments of: Gynecology-Obstetrics, pediatry and Neonatology.

#### 4.- UNIQUE FEE

Although we have not been able to carry on a hospital cost study, we have implemented the unique procedure fee, with the end of been able to register the free index or social service that the hospital has, before this measure it was 4.8%, situation that does not reflect the reality because we have more than one sub-registration.

#### 5.- POA REPORT

Regarding the progress of the POA 2003, this job is executed in the different services of the hospital such as: Pediatry, Gyneco-Obstetrics, neonatology, Surgery Room, Main Warehouse, Administration, Accounting, Nursing, Laboratory, X rays, Pathology, Ecography, Statistics, Food Intake, Nutrition, Economics, Maintenance, Clearing and Medical Residence.

The procedure of this work was made through methodology workshops on the elaboration of the POA, in the hospital and later a follow up in each one of the services.

The forms used in the elaboration of our POA were:

Form N° 1: Hospital mission and vision

Form N°2 : Objective description

Form N° 3: Activities description by service

Form  $N^{\circ}$  4 : Personnel requirement Form  $N^{\circ}$  5 : Fixed active requirement

Form N° 6: Materials and consumables requirement.

In meetings with all the personnel we have defined the MISSION and VISION of the Materno Infantil Hospital.

#### **MISSION**

#### WHAT ARE WE?

1. Public hospital specialized in Mother-Child health, depending on the MSPS in what refers to human resources and on the Municipality of Trinidad in what refers to infrastructure and equipment.

#### WHO DO WE ASSIST?

- 2. We offer integral health care services to women in her pre-delivery, delivery and post-delivery phases.
- 3. Integral health care services to the new born, children and adolescent.

#### WHAT DO WE OFFER?

- 4. Assistance to women in Gynecology and Obstetrics.
- 5. Assistance to childhood and adolescence in integral health care in prevention, reparation and rehabilitation of their health.
- 6. We also offer sexual and reproductive orientation to couples.

#### **VISSION**

#### WHAT DO WE WANT TO BE?

- 7. Regional reference 3<sup>rd</sup> level hospital, offering quality and warmth the users, gaining the satisfaction in the medical attention and excellence in medical care projected to the community, becoming the "MOTHER, CHILD AND ADOLESCENT FRIENDLY HOSPITAL".
- 8. Education/Training of hospital human resources through teaching and investigation.
- 9. To look for and maintain regional, national and international relationships to conquer the modern technology.

#### 6.- SOWT ANALYSIS

We carried on the SOWT analysis of the hospital.

We verified the situation in each one of the different sections of the hospital, to know in detail how they work daily, and also to know their problems, weaknesses, strengths and threats and opportunities.

Strengths:	Weaknesses:
We have the following:	We have the following:
- Accessibility	-Limited Human Resources
Medical Specialists	Obsolete equipment
Adequate infrastructure	- Lack of personnel motivation
	Political and Syndicalism inherence
Opportunities:	Threats:
Among the opportunities we have:	We have the following:
- Basic Health Insurance	Lack of organization at this moment.
We have all the legal instruments to	
implement them in each level of the hospital.	
- International Agencies support	
We have a lot more interest on the part of	
the regional and national authorities to carry	
on this process.	

#### IN HOSPITAL INFECTIONS COMMITTEE

We formed the Epidemiological Surveillance and Intrahospitalary Infections Committee, constituted by:

* Dr. Jorge Pinto Parada	DIRECTOR
* Dra. Carmen Arce Toro	PROFESSORS CHIEF
* Dra. Ma. Antonia Costales Fernández	PROGRAM RESPONSIBLE
* Dr. Eduardo Alí Jiménez	GYNECOLOGY CHIEF
* Dr. Pedro Aguirre Núñez	GUARD DOCTOR
* Dr. Gastón Medrano	NEONATOLOGY CHIEF
* Dr. Félix Veintemillas Shintani	EPIDEMIOLOGY RESPONSIBLE
* Dr. Jorge Arteaga Ribera	EPIDEMIOLOGY RESPONSIBLE
* Lic. Heidy Ojopi Méndez	SURGERY ROOM SUPERVISER
* Dra. Miriam Vélez Chávez	LABORATORY CHIEF
* Lic. Marleny Moye Ibáñez	NURSE CHIEF
* Lic. Ramiro López	ADMINISTRATIVE DEPARTMENT CHIEF
* Lic. Cecilia Vásquez	PROGRAM TRAINER AND SUPERVISER

Starting on the formation of the Infections Committee we started the process of training to all the personnel of the Materno Infantil Hospital in each one of its areas:

- \* Medical Area
- \* Nurse Area
- \* Administrative Area (General Service Personnel)
- \* Rotatory Internship
- \* Medical Residence

Once the training is over, we proceed to the first rule of the security barrier, adequate for our necessities and idiosyncrasy for their respective application.

We have a responsible for in hospital infections in the Gynecology-Obstetrics area as well as the Pediatry area whose monthly report is in the hands of Lic. Marlene Moye Ibáñez, who also carries on the detection of in hospital infections.

In the lab level we have implemented 2 bacteriology tests:

Uro-cultive y Co-procultive; anyway we do not count with hemo-cultives or bacteria detection tests because we do not have enough economic resources, neither support by more personnel in the laboratory.

The support that SINAVIS promised on the year 2000 has not been effective until today, anyway, the Committee stays put in their principles and has not put down the epidemiological surveillance because of this.

We have implemented in this last month the use of discartable napkins in the external consultation for pediatry and gynecology.

#### INDICATORS CHARTS

We have elaborated and put in practice the monthly monitoring chart of indicators. (See attached chart)

#### PHARMACY AREA

#### **RESULTS:**

- Coding of the medicine according to the codes of the National Therapeutic Form.
- To put the medicine in the shelves, for the revolving fund and the SBS.
- To open new physical existence kardex for the medicine of the revolving fund and Basic Health Insurance.
- Elaboration of the list of existent medicines in the pharmacy by generic name.
- Pharmacy service flowchart elaboration.
- Pharmacy Organization Chart elaboration.

• To form the medicine acquisition committee.

#### **MAINTENANCE**

We have realized a training under the supervision of Ing. Vélez for the maintenance personnel with some limitations because it is non professional employees.

By instructions of Ing. Vélez we will put in practice the maintenance sheets of the medical equipment of: Anesthesiology, Ventilation, X Rays and general medical equipment.

Trinidad, November 19 2002

Dr. Jorge Pinto Parada
DIRECTOR
HOSPITAL MATERNO INFANTIL

4.2.3

CS Nueva Trinidad

# PILOT STUDY OF THE HEALTH CENTER NUEVA TRINIDAD

### REPORT OF THE SECOND MONITORING

**NOVEMBER 2002** 

#### PILOT STUDY OF THE HEALTH CENTER "NUEVA TRINIDAD"

#### REPORT OF THE SECOND MONITORING

The CS "Nueva Trinidad" moved to their new infrastructure with the new equipment donated by JICA (International Agency of Japanese Cooperation), on August 8 of the current year; it is starting from this date that our opportunity and quality of attention offered to the inhabitants of the neighborhood "Nueva Trinidad" are in ascent.

#### 1.- INPUTS

a) JICA (International Agency of Japanese Cooperation): we received gratefully the endowment of the new infrastructure of the health center and the equipment of the same one, as well as to the efficient human resources that work with the project (technical cooperation).

#### b) Bolivian Side

**PREFECTURE:** Our gratefulness for the collaboration with the human resources of the study, with the infrastructure and equipment of the office of the project and for the endowment of technical advice.

MUNICIPALITY: We thank to our Honorable Municipal Mayor's office of the city of the Santísima Trinidad for the assignment of human resources (ITEMS) through the HIPC-II, to contribute with the donation of the land for the construction of the new health center and for the improvement of its basic infrastructure. We also highlight their valuable contribution with the payment of services of light, for the permanent endowment of water by means of the transfer with cisterns. We also thank for the improvements carried out in our new infrastructure and for the project for the construction of the thatched top, watchman's room and of deposit and the necessary new equipment for the Laboratory and Childbirth Room. Also our gratefulness for the endowment of two wooden ladders and for the payment of the

Also our gratefulness for the endowment of two wooden ladders and for the payment of the Basic Insurance of Health of the months of April to June.

**SEDES:** We also thank to the SEDES - BENI (Departmental Health service) to collaborate with the endowment of articles and for the active coordination at level of the services network with the System of Regional Health: Post-area-district-SEDES (Administration Model, Administration and Territorial Jurisdiction of the Plan Bolivia).

We comment that we have received frequent supervisions on the part of our Area Chief and that they have provided us with the vaccines, vaccine consumables and of family planning, posters of the PAI, anti-tuberculosis medications and for the permanent courses of training that they offer us.

A special gratefulness to the current Director of the Sedes-Beni to demonstrate us their constant support for the success of the project, an example of it is the efficient collaboration with the Item HIPIC-II of our Biochemistry, which has been temporarily suspended.

**COMMUNITY:** active Coordination with the Health committee of "Nueva Trinidad", with the leaders of the OTBs and traditional midwives.

- To all the institutions mentioned previously our more sincere gratefulness because they contributed somehow with the development and progress of our Department and mainly with

the elevation of better quality of life for the inhabitants of the neediest areas; we also invite them to continue contributing with this type of help in well of the health of our inhabitants.

#### 2.- RESULTS / EFFECTIVENESS

#### 1) Influence of the Illness and Mortality Structure

a) **Demographic Approach:** In the first four months of work they registered 2 causes of death, which correspond to older than 35 years and in people that didn't receive medical attention in our health service.

MORTALITY CAUSES FROM APRIL TO JULY

Cause of Death	Sex	N°
Peritonitis	F	1
Suicide	M	1

- During the months of August to October we have not registered deaths in the residents of the area, for what we don't have rates of mortality. We don't assist childbirths in the health center, therefore we don't have rates of natality.

#### LITERACY LEVEL IN THE NEIGHBORHOOD

LEVEL	TOTAL	%
Basic	721	34%
Intermediate	394	19%
Medium	456	22%
University	25	1.0%
Technician	46	2.0%
Professional	38	2.0%
Illiterate	20	1.0%
< 5 years without schooling	386	19%
TOTAL	2086	100

#### OCCUPATION OF THE INHABITANTS

OCCUPATION	TOTAL	%
Student	859	41%
University student	23	1.0%
Professionals (teachers, business administrator, audit.)	38	2.0%
Others (Mason,taxi driver, mechanic, laborer, etc)	780	37%
None	386	19%
TOTAL	2086	100

#### b) Influence to solve the difficulties for inhabitant to access the health services.

- We confirm once more that the accessibility to our CS in what concerns to the location and the time taken in arriving to the same one is adequate, since the residents that inhabit the areas farther away from the urbanization don't take more than 15 minutes to reach by foot; we also highlight that we have had an upward percentage as for the accessibility of patients that are from the neighboring areas or of other urbanizations, even of the central area of the city of Trinidad.
- We mention the difficulty in the entrance to the health center in rainy season, since the streets turn inaccessible for the lack of the maintenance of the same ones.
- In what concerns to the accessibility taking into account the population's socioeconomic state we begin to have acceptance for the inhabitants and many people that refused to attend the health center for different reasons like customs, beliefs, and other, they have been convinced and taken by our auxiliary nurses to the center and they have been informed in respect to the importance of their periodic control in the health center.

#### c) Detail location maps of Nueva Trinidad. (Annex I–A)

#### 2) Expansion of the Covering of the Health Services

#### a) Expansion of the covering of the medical health services

- The CS "Nueva Trinidad" is in a sector included inside the health area VI(Cipriano Barace) of the health District 0I; it has a population of 2086 inhabitants that have the following main characteristics:

AGE GROUPS	S	EX	TOTAL	%
	M	F		
< 1 year	40	33	73	3
1 – 4 year	133	136	269	13
5 – 14 year	336	342	678	32
15 – 49 year	469	479	948	45
50 y > year	60	58	118	7
Grand Total	1038	1048	2086	100%

AGE GROUPS BY SEX

Among other characteristics we have: the population's 80% stores the water that is provided by the cisterns in barrels, since they don't have installation of pipes; the population's 8% doesn't have latrines, 19% is supplied of light by means of candles, 20% builds its housings with palm tree leaves, tables, plastics and others.

- The health programs that have been inplemented in the Health center are the same ones that in the first months of work and they are:
  - Integral management to Prevalent Illnesses of the Childhood (EMCI)

- Feeding and Nutrition
- Integral management to the woman ,the Sexual and Reproductive Health
- Integral management of the Scholar and Adolescent
- Integral management to the Third Age
- Habits and Healthy lifestyles
- Oral health
- The difference with the first four months of work is that these national health programs were not very developed by the equipment and inadequate infrastructures; we highlight that today we have 70% of the equipment what allows us to offer a better quality of attention. In the last four months of work we also implement the program of Control of the Tuberculosis.
- The household visits continue representing our fundamental pillar in terms of education and prevention of illnesses.
- **b)** Health support by the radio system: thanks to the new equipment on the part of JICA, we have the radio communications, which is good to us for the linking with the different networks of health service, mainly with the pilot studies.

#### 3) Changes in the Institution and Administration

#### a) We have carried out the POA 2003, which we detail in ANNEX III

#### b) Support to the Health center by Municipal Government's Committee

- The Honorable Municipal Mayor's office of the city of the Santísima Trinidad as in the first four months of work, shows interest and collaboration in all our activities, for example: The assignment of human resources through the HIPC-II, for the payment of wages to an Auxiliary nurse and to endow us of a watchman starting from August.
- We remember that it contributed with the donation of the land for the construction of the new health center and with the improvement of its basic infrastructure.
- We also highlight their valuable contribution with the payment of services of electricity, for the permanent endowment of water by means of the transfer with cisterns, since it is not had water by pipes.
- We also thank for the improvements carried out in our new infrastructure and for the project for the construction of the thatched top, watchman's room and of deposit and the necessary new equipment for the Laboratory and Childbirth Room.

Also our gratefulness for the endowment of two wooden ladders and for the payment of the Basic Insurance of Health of the months of April to June.

**c**) **Political Intervention:** thanks to our Prefecture and to our H. Municipal Mayor's office we have not had interventions neither political affectations.

#### 4) Changes in the Quality of the human resources

#### **MEDICAL PERSONNEL BY PROFESSION**

NAMES	PROFESSION	LOCATION
Sarah Yvonne Garrón Arias	General Doctor	Nueva Trinidad
Marco Antonio Aponte Larach	Gynecologist	Nueva Trinidad
Carlos Arteaga Vaca	Dentist	Nueva Trinidad
America Torrico V.	Biochemist	Nueva Trinidad
Pura Cosío Roca	Licensed nurse	Nueva Trinidad
Gladys Moreno Ríos	Auxiliary nurse	Nueva Trinidad
Aurora Santalla Mamani	Auxiliary nurse	Nueva Trinidad

#### a) Working days and hours of the medical personnel and others

### WORKING DAYS AND HOURS OF THE PERSONNEL OF THE HEALTH CENTER OF NUEVA TRINIDAD

NAMES	POSITION	WORKING	WORK	ITEM	
		DAYS	LOAD	SOURCE	
Marco Antonio Aponte Larach	Director by SEDES-Beni	Monday-Friday	10-12, 14-18	SEDES-BENI	
Sarah Yvonne Garrón Arias	Director by JICA	Monday- 9-12, 15-18 Friday		HIPC-II	
Carlos Arteaga Vaca	Dentist	Monday- Friday	9-12	SEDES-BENI	
America Torrico V.	Biochemist	Monday- Friday	9-12	HIPC-II	
Pura Cosío Roca	Licensed nurse	Monday- friday	7:30 a 13:30	HIPC-II	
Gladys Moreno Ríos	Auxiliary nurse	Monday- Friday	13:30 a 19:30	HIPC-II	
Aurora Santalla Mamani	Auxiliary nurse	Monday-Friday	8-12, 14-18	TRINIDAD MUNICIPAL ITY	
Fabian Bravo	Watchman	Monday- Sunday	18- 7:30	TRINIDAD MUNICIPAL ITY	
América Torrico	Biochemist	Monday- Sunday	9- 12	HIPC-II	
María Luisa Zabala	Janitorial personnel	Monday-Friday	18-19	Nueva Trinidad Center	

<sup>-</sup> In the last four months they have incorporated to the health team the lab personnel (Biochemistry) from September and we highlight to the personnel of cleaning, which is paid with own funds of the health center since the first of September.

#### b) Problems of the payment of wages for the different contract methods

- Among the main problems they are the delay in the payment on the part of the HIPC-II and October a discharge memorandum was send to our Biochemistry on the part of the HIPC-II without justification; it is in this problem that the Director of SEDES-BENI is collaborating efficiently, and we wait prompt solution.

#### c) Attitude and motivation of the health team

- The number of personnel of the CS is adequate, with a good relationship and we stand out the necessity in the training of the handling of the SNIS (National System of Health Information). For a better organization we already have a manual of functions.
- The relationships with the community are adequate; there is mutual acceptance (doctor-patient-inhabitant-organizations).
- Among our expectations as health personnel are: to contribute to improve the benefits of health service what will take us to elevate the quality of life of inhabitants
- The trainings constitute a stimulus for our personnel, they also help us to improve the quality of attention, we still see the necessity of the same ones in the health personnel.

#### EDUCATION ACTIVITIES TO THE HEALTH PERSONNEL

Subject	Date	Place	Duration	Doctors	Nurse	Dentist	Bioche
					S		mist
Teniasis	5/08/02	District 0I	2 hours	1			
Nutrition and	7/08/02	Cipriano	2 hours	1	2		
development control in <5		Barace					
years		Center					
Simple taking	13 to 15	Hostería	18 hours	1	1		
of PAP and	08/02	Hotel					
cervical cancer Endemic	27 1	M - 4	10 1	1	3		
channels	27 and 28 08/02	Materno Infantil	12 hours	1	3		
U-101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	28 08/02	Hospital					
Lab technique	6 to 8	CENETROP	36 hours	1	2		1
Lub teeminque	09/02	Santa Cruz	50 Hours	1	2		1
Death	10/09/02	District 0I	2 hours	1	3	1	1
certificate	10/07/02	District of	2 110013	1		1	1
filling							
Health	11 and	Materno	12 hours	1	3	1	1
management,	12 09/02	Infantil					
TB, Sanitation,		Hospital					
<b>Prenatal</b>							
control							
Fixed day	18 to 20	Auxiliary	18 hours		2		
method	09/02	Nurse					

		school				
P.O.A.	20/09/02	Materno	6 hours	1		
		Infantil				
		Hospital				

#### 5) Financial resources

#### a) Shared Cost

**Supply:** we have had good assignment of the number of items, and in respect to the operation and maintenance of the new Health center on the part of the concerned agencies (SEDES, MUNICIPALITY, PREFECTURE-JICA), but it has not still been made the payment of the funds of the Basic Insurance of Health of none of the months of work.

- For the growth of the CS, it's necessary an Administrator, since for the multiple functions that the doctors as the nurses carry out, it diminishes the quality of attention to the patient.

#### CONSULTATION TYPE ACCORDING TO ECONOMICAL DISBURSMENT

CONSULTATION QUALITY	April-July	August- November
	%	%
Basic Insurance	80%	68.2%
Paid	9.0%	21.0%
Social service	10.0%	6.8%
Re-consultation	1.0%	4.0%
Totals	100%	100%

**Population's Payment Willingness:** We have a remarkable ascent of the paid consultations in comparison to the beginning of the work, equally in what concerns to the re-consultations, what indicates us that although the population is of scarce economic resources, it begins to have acceptance. In spite of that we are not satisfied with what concerns to the SBS, the consultations they have diminished instead of going ascending permanently because it is a population right.

ECONOMICAL REPORT BY MONTH OF THE HEALTH CENTER OF NUEVA TRINIDAD

	April	May	June	July	August	September	October
Income							
Consultation	80	150	105	175	280	284	305
Injections, serum, curatives	2	12	22	10	66	50	128
Dentistry				82.5	45	317	255
Others						36	58
TOTAL	82	162	127	267.5	594	734.1	874.4

Outcomes							
Consumables	35	33.5			39	222.5	38
Services		15	36.5	22	69	95	138
Materials	47	64	85.5	25.5	323.7	208	257.1
Others		49.5		17	119.8		409.5
TOTAL	82	162	122	64.5	552.1	605.5	843.6

#### 6) O & M and use of the Health Units and Medical equipments

- Until the moment we have not presented any type of problems with the new equipment of the health center that cannot be solved. Among them they are: The freezer is not in good shape (inadequate cooling), the same one was taken to the city of Santa Cruz and returned in good state, during the absence of the same one the area Cipriano Barace refrigerated the vaccines that were daily transported in cooling water bottles.

We also highlight that the septic camera presented filtration, which is a source of environmental contamination; the deposit of water in the first rain submerged; there are also some cracks in the walls.

#### 7) Distribution and use of medicines

## a) Provision of medicines for the SBS: Administrative process and financing by the municipal government

By the middle of November the economic payment is made of that billed to the SBS from the months of April to June; because in this period we didn't have infrastructure neither equipment we depended on our area headquarter Cipriano Barace; it is with them that the billing is carried out and to which the SBS is paid; because of administrative outlines it is that they have not still given us what corresponds us, but in next days it will be made.

## b) Medicine Purchase for the health center: Class and quantity of each medicine, source and fund

By the middle of August a revolving fund is implemented with medications given under credit, in the month of September a new purchase with the same procedure is carried out. We detail in Annex VI the listing of the same ones.

## c) Buy, storage and distribution of the medicines to the inhabitants: Control of time and quality to know the order for the medical personnel

- Although we don't have a well equipped pharmacy, it has essential medicines that are to the economic reach of our inhabitants, because they are sold at a cheaper price that in other pharmacies; the population is shown satisfied with the adopted measure, because it means that they can save in the transportation cost for the purchase of the medicines in the central area.
- The medicines are stored in a shelf and the sale is carried out by the nurses using a registration method for each sale; an inventory of the medications is carried out monthly and the expiration date is controlled.

#### d) Solution ways in the event of technical or logistical problems

As the urbanization "Nueva Trinidad" is inside the city of Trinidad, any medication that doesn't exist in our pharmacy is bought in the central pharmacies, therefore they don't represent serious problems.

#### 8) Changes in the referral system

#### a) Referrals, criteria, forms, collect system, opportunity

- With respect to the filling of the forms of the SNIS (National System of Information in Health) we have an improvement in comparison to the first four months of work, even then the nursing personnel has some difficulties what causes delay to offer a better quality of attention or the household visits; we emphasize that many of these forms are not in the District 0I for what we had to take out photocopies of them with our own funds.
- The system of data collecting is carried out by means of the books of the SNIS and of the weekly and monthly forms of information of the service that are also sent to the District 0I.
- The information that is correspondent to the District I, is again analyzed in CAI, (Information Analysis Committee) which are every four months and biannual, where the weaknesses of each center are detected and they think about solutions by means of the elaboration with the team of work of a POA (Annual or biannual Operative Plan) taking into account these low areas. (To see information of the CAI see Annex IV)
- We make notice that the filling of the forms of the SNIS implies excessive work and therefore investment of time, what means to diminish the quality and the time of attention to the patients.

#### b) Management and follow up of patients: Referrals and vice versa.

#### AGE REFERRED PATIENTS

< 5 years	> 5 years	Total
15	19	34

- Of these 34 referrals 21 correspond the SBS, therefore they are derived to the Materno Infantil Hospital, the other 13 have been correspondents to the Trinidad Hospital in their majority. We highlight that in the first monitoring we didn't have any counter-referral; at the moment we have 3 of the Materno Infantil Hospital and 1 of the Health center (Central Area).
- For people that are not covered by the Basic Insurance of Health and they need to be referred at a second level of attention, the health center sends them with a referral in a Paper-prescription, leaving a copy for the health center, with the respective signature of the responsible one and seal of the establishment.
- At the moment we have a patient that carries out treatment for lung tuberculosis, he was referred from the "Central" health center, in previous weeks the patient entered to the Caja

Nacional de Salud for hepatic problems, this patient is visited daily by the General Doctor of our institution who participates of the medical visits.

#### c) Accessibility, transportation means, roads conditions, radio communications

Generally many of the referred patients have to move by themselves to the hospitals of second level in motorcycle taxis, some have been transported by the nurse assistant in the motorcycle of the health center and others in the car of the Odontologist (those of scarce economic resources).

#### 9) Changes in APS and the community health system

## NUMBER OF NEW CONSULTATIONS AND RE-CONSULTATIONS FROM APRIL TO JULY

Age froup	Sex	April	May	June	July	Totals
Younger than 1	Man	6	11	2	13	32
year	Woman	3	10	5	8	26
From 1 to 5 years	Man	19	16	13	18	66
	Woman	12	20	9	15	56
From 6 to 14	Man	1	9	6	1	17
years	Woman	2	5	6	7	20
From 15 to 45	Man	1	6	4	8	19
years	Woman	32	37	26	55	150
From 45 years	Man	0	0	0	2	2
and more	Woman	7	12	4	6	29
<b>Re-consultations</b>		15	26	14	21	76
TOTALS		83	126	75	154	438

TYPE OF CONSULTATIONS FROM AUGUST TO NOVEMBER

CONSULTATIONS	FREQUENCY	PERCENTAGE
New	623	78.4%
Repeated	172	21.6%
TOTALS	795	100%

We could mention that the total number of consultations and re-consultations is noticeably ascendant in relation to the first tour months of work.

FREQUENCY OF ATTENTION BY AGE FROM AUGUST TO NOVEMBER

AGE	FREQUENCY	PERCENTAGE
Younger than one year	129	16.2%
1 to 4 years	251	31.6%
5 10 14 years	76	9.6%
15 to 45 years	299	37.6%
Older than 45 years	40	5.0%
TOTAL	795	100%

Of the analysis of the previous charts we confirm that the biggest number of patients that attend the health center is understood among the ages of younger than 5 years and between 15 to 45 years, so much in the first monitoring as in the second monitoring; this result means that a good acceptance of the SBS exists.

MAIN ACTIVITIES FROM APRIL TO JULY

	APRIL	MAY	JUNE	JULY	TOTAL
General	83	126	75	154	438
medicine					
Emergencies	3	5	0	3	11
<b>House visits</b>	1	3	3	25	32
Prenatal	6	15	11	19	51
control					
Nutrition	0	36	19	52	107
control					
Healthy	0	6	1	6	13
child control					
STD control	0	0	0	3	3
Family	11	17	9	26	63
planning					

FREQUENCY OF DIAGNOSIS FOR CONSULTATION FROM AUGUST TO NOVEMBER

DIAGNOSIS	FREQUENCY	PERCENTAGE
ARI/Without	268	23.2%
PNEUMONIA		
MALNUTRITION	124	10.8%
FAMILY PLANNING	112	10.0%
ADD/Without DEHYD.	87	7.5%
PRENATAL CONTROL	78	6.8%
DERMATOLOGICAL	60	5.2%
ILLNESSES		
HEALTHY CONTROL	53	4.6%
URINARY	42	3.6%
INFECTIONS		
SEXUALLY	41	3.5%
TRANSMITTED		
DISEASE		
PARASITOSIS	30	2.6%
ANEMIA	26	2.2%
SALMONELOSIS	17	1.5%
ARI/With PNEUMONIA	14	1.2%
ADD/ With DEHYD.	9	0.7%
OTHERS	192	16.6%
TOTAL	1153	100%

The main morbility causes in the month of August in descending order are:

Acute breathing infections without pneumonia, malnutrition, acute diarrhea illnesses without dehydration, dermathological diseases (piodermitis, impetigo to blister, escabiosis, forunculosis and abscesses), infections of the urinary track, sexually transmitted diseases, intestinal parasitosis, anemia, salmonelosis, acute respiratory infections with pneumonia.

Among other illnesses there are: arterial hypertension, arthritis, endometritis, conjunctivitis, allergies, alimentary transgressions and others.

We highlight 7% of prenatal control, 10 % of family planning and only 4.6% of healthy children's control.

NUMBER OF NEW CONSULTATIONS AND RE-CONSULTATIONS BY AGE AND SEX FROM APRIL TO JULY

Age group	Sex	April	May	June	July	Totals
Younger than 1	Man	6	11	2	13	32
year	Woman	3	10	5	8	26
From 1 to 5 years	Man	19	16	13	18	66
	Woman	12	20	9	15	56
From 6 to 14	Man	1	9	6	1	17
years	Woman	2	5	6	7	20
From 15 to 45	Man	1	6	4	8	19
years	Woman	32	37	26	55	150
From 45 and over	Man	0	0	0	2	2
	Woman	7	12	4	6	29
<b>Re-consultations</b>		15	26	14	21	76
TOTALS		83	126	75	154	438

#### DIAGNOSIS BY SEX FROM AUGUST TO NOVEMBER

	S	SEX		
DIAGNOSIS	FEMENINE	MASCULINE	TOTAL	%
ARI/Without	112	156	268	23.2%
PNEUMONIA				
MALNUTRITION	61	63	124	10.8%
FAMILY PLANNING	106	6	112	10.0%
ADD/Without DEHYD.	39	49	87	7.5%
PRENATAL CONTROL	78	-	78	6.8%
DERMATOLOGICAL	24	36	60	5.2%
DISEASES				
HEALTHY CONTROL	22	31	53	4.6%
URINARY INFECTIONS	32	10	42	3.6%
SEXUALLY	39	2	41	3.5%
TRANSMITTED				
DISEASE				
PARASITOSIS	16	14	30	2.6%

ANEMIA	13	13	26	2.2%
SALMONELOSIS	13	4	17	1.5%
ARI/with PNEUMONIA	5	9	14	1.2%
ADD/ with DEHYD.	7	2	9	0.7%
OTHERS	122	70	192	16.6%
TOTAL	689	464	1153	100%

#### DIAGNOSIS BY AGE FROM AUGUST TO NOVEMBER

			AGE				
DIAGNOSIS	< 1 year	1 to 4 years	5 to 14 years	15- 45 years	> 45 years	TOTAl	%
ARI/W.O. PNEUMONIA	74	138	37	17	2	268	23.2%
MALNUTRITION	31	92	1	0	0	124	10.8%
FAMILY PLANNING	0	0	0	110	2	112	10.0%
ADD/Without DEHYD.	22	58	5	2	0	87	7.5%
PRENATAL	0	0	0	78	0	78	6.8%
CONTROL							
DERMATOLOGICAL	10	27	12	7	4	60	5.2%
DISEASES							
HEALTHY CONTROL	21	31	0	1	0	53	4.6%
URINARY	0	1	9	28	4	42	3.6%
INFECTIONS							
SEXUALLY	0	0	7	34	0	41	3.5%
TRANSMITTED							
DISEASE							
PARASITOSIS	0	13	9	3	5	30	2.6%
ANEMIA	5	13	2	6	0	26	2.2%
SALMONELOSIS	0	0	6	11	0	17	1.5%
ARI/with PNEUMONIA	4	8	2	0	0	14	1.2%
ADD/ with DEHYD.	1	6	0	2	0	9	0.7%
OTHERS	8	37	17	99	31	192	16.6%
TOTAL	176	424	107	398	48	1153	100%

### **NUMBER OF DENTIST CONSULTATIONS**

Months		August	September	October	Totals
SEX	Man	7	33	21	23
	Woman	17	67	54	43
TOTALS		24	100	75	66
Extractions		11	7	10	
Sealings		0	23	20	

The dentist consultations are in ascent and thanks to the new equipment sealings are being carried out, what means the biggest economic entrance for the sustenance of the health center.

#### COVERAGE OF EXTERNAL CONSULTATION PATIENTS FROM APRIL TO JULY

COVERAGE	<b>%</b>
First growth and development control in < 2 years	58.8
Repeated growth and development control in < 2 years	13.4
First growth and development control in children from 2 to 4	12.7
years	
Repeated growth and development control in children from 2 to 4	
years	
A vitamin intake in children from 2 months to 4 years	14.8
Prenatal control	23.0
Pregnant women with 4 prenatal controls	25.8
Family planning orientation	57.3

The coverage of growth and development control correspond to 2 and a half months of work, since during the first months we didn't have a scale.

The coverage of vitamin A intake corresponds only to the months of June and July, because we didn't have vitamin A.

According to the coverage of prenatal control we can say that the reception of pregnant women takes a lot of time, and we should also mention that the orientation for family planning coverage is high due to the household educational chats that our nurse assistants carry out, we recommend all our co-workers of all the health centers of Trinidad to continue household education in diverse topics.

COVERAGE OF PATIENTS FROM EXTERNAL CONSULTATION FROM AUGUST TO NOVEMBER

COVERAGE	%
First growth and development control in < 2 years	97.4%
Repeated growth and development control in < 2 years	44.5%
First growth and development control in children from 2 to 4	37.5%
years	
Repeated growth and development control in children from 2 to 4	
years	
A vitamin intake in children from 6 months to 4 years	30%
Prenatal control	29.0%
Pregnant women with 4 prenatal controls	44.4%
Family planning orientation	20.8%

All of our coverage has ascended noticeably since August to November in comparison to the beginning of the work.

#### PREVALENCE FROM APRIL TO JULY

Prevalence	Percentage
Malnutrition in < 2 years	34.37
Malnutrition from 2 to 4	46.5
years	
ARI without pneumonia < 5	43.4
years	
ARI with pneumonia < 5	4.5
years	
ADD < 5 years	19.5

#### PREVALENCE FROM AUGUST TO NOVEMBER

Prevalence	Percentage
Malnutrition in < 2 years	32.7%
Malnutrition from 2 to 4	42.8%
years	
ARI without pneumonia < 5	89.0%
years	
ARI with pneumonia < 5	68.0%
years	
ADD < 5 years	26.7%

- We qualify as malnutrition to the children understood in the classifications D, E and F what means: Light, Moderate and Severe according to the weight.
- In the first monitoring we didn't have appropriate equipment for this control during almost two months.
- We can observe that the prevalences of malnutrition in < than 4 years have diminished, happening the opposite in the IRA and ADD

## FREQUENCY OF MALNUTRITION ACCORDING TO LEVEL FROM AUGUST TO NOVEMBER

MALNUTRITION LEVEL	FREQUENCY	Percentage
Light	84	67.8%
Moderate	32	25.8%
Severe	8	6.4%
TOTAL	124	100%

It is important to let know that the frequency of Malnutrition in children smaller than 5 years is higher in our area, but the one that we report is only of children that have attended the Health center and the type of malnutrition that prevails for one or another reason is the light one as we mention in the first monitoring

- We participated in two campaigns of vaccination of the PAI (Expanded Immunization Program). Our vaccination coverage have risen thanks to our cold chain for the conservation of the vaccines and the application of the same ones in the health center

#### NUMBER OF VACCINES FROM AUGUST TO NOVEMBER

VACCINES	%
First pentavalence dose in< than 1 year	61.6%
Third pentavalence dose in < than 1 year	35.0%
First antipolio dose in < than 1 year	61.6%
Third antipolio dose in < than 1 year	35.0%
BCG in < than 1 year	0%
SRP from 12 to 23 months	100%
Tetanus toxoid 1 dose	20.6%
Tetanus toxoid 2 dose	3.8%
Tetanus toxoid 3 dose	5.6%
Tetanus toxoid 4 dose	1.1%
Tetanus toxoid 5 dose	1.7%

#### USERS OF CONTRACEPTIVES FROM APRIL TO JULY

Methods	New (%)	Continuing (%)
Depoprovera	15.6	18.0
Oral contraceptive	1.9	3.8

#### CONTRACEPTIVE USERS FROM AUGUST TO NOVEMBER

Methods	New (%)	Continuing (%)
Depoprovera	20.4%	43.3%
Oral contraceptive	17.3%	53.8%

- The oral contraceptive has only been distributed in August, September and part of October due to the lack of them in the District 01; in spite of that there is a remarkable ascent of users,
- When we speak of new users we refer to the women that for the first time are using this type of methods (those captured by the center), and the continuing users are those that have gone to the Health center to be restocked of the birth-control method that they have already begun in other health centers.
- We comment that the number of condom users is rising in comparison to the first monitoring; it doesn't happen this way to the natural methods, because we don't present any user in these last months.

#### **OUTSIDE ACTIVITIES FROM AUGUST TO NOVEMBER**

ТҮРЕ	NUMBER	0/0
Community chats	7	41.1%
Meetings	4	23.5%
House chats	3	17.7%
Community gatherings	2	11.8%
Others	1	5.9%
TOTAL	17	100%

We present detailed information in Annexes VIII and IX

- By means of these household visits it is that they have detected the pregnant women, younger than 5 years, patient with higher risk and people that receive family planning by housing (See annex II–A B–C and D).
- The Health committee is our main collaborator in all our activities with the community, during these 4 months of work it has carried out many activities in comparison to the first monitoring when the prominent thing was a fair of sexual and reproductive health; now it has carried out different activities in coordination with the health center emphasizing to help the children, disabled people and old men; for a bigger detail of activities see annex X.
- We are working together with the Health committee and the OTBs in what concerns to environmental health, in two local meetings we carried out the dismounts of 2 lots and cleaning of gutters. On October 18 we delivered a letter to the presidency of the Local Meeting "Villa Conchita" directed to 49 partners that have their fallow lots and without cleaning, inviting them to dismount and clean of the same ones to prevent infectious focuses in a term of 15 days. We are carrying out the same thing with the other meetings. Different letters have also been sent to authorities of the city so that they carry out civic security in the area, so that they control the bars, discos and the sale of controlled substances.
- During the months of September and October we have the presence of students of the career of Nursing of the Technical University of the Beni (UTB), which made a valuable contribution in household visits with different topics. The month of September they visited 1429 people and October to 420 (see Annex VII).
- Emphasis is made in the orientation on different topics (according to the treated pathology) during the consultation, so much in General Medicine, Pediatrics and in Ginecology/Obstetrics.
- By means of the EMCI (Integral Management of Childhood Illnesses) directed to children smaller than 5 years, it is that being based on an integral consultation where they carry out an evaluation of the nutritional state, food intake orientation, prevention and treatment of anemia, vitamin A administration, etc.
- Constantly they carry out the promotion to the inhabitants under the conditions of health, by means of household visits, inside the institution orientation and with the different civic organizations of the area.

- During the month of September education and dental revision were carried out in the health center to the children of the school "Nueva Trinidad."
- We detail the attendance next from the residents to the health center according to the location of the Health center, which represents a territorial extension of 360.256.10 square meters see annex I-B

FREQUENCY OF ASSISTANCE TO THE HEALTH CENTER BY THE LOCAL MEETING FROM AUGUST TO NOVEMBER

LOCAL MEETING	FREQUENCY	PERCENTAGE
26 de Enero	333	41.9%
21 de Septiembre	251	31.5%
Villa Conchita	71	9.0%
La Merced	44	5.6%
Others	96	12.0%
TOTAL	795	100%

We highlight that 12% of the consultations of these four months of work is coming from other near neighborhoods or of the central area.

**Traditional medicine:** the use of the traditional medicine is very common among the inhabitants ,for example: The use of chamomile tea in the faringoamigdalitis, the use of eucalyptus leaves tea in cough and flu; garlic with milk for expulsion of intestinal parasites the same as chewing the papaya seeds, application of aloe vera leaves in dermal infections and in the cases of not severe ARI with pneumonias the health center recommends homemade nebulizers based on vapors of eucalyptus water with menthol ointment. We highlight that the health center respects this medicine type provided they don't produce adverse effects.

#### 10) Influences to SNIS / Epidemiological prevention

## a) Effectiveness in the education and training for the laboratory equipment for CENETROP

The training in Laboratory techniques given on the 6, 7 and 8 of September in CENETROP of the city of Santa Cruz have been very productive, since our personnel is under conditions of carrying out the main lab tests and of adopting the bio-security measures.

With respect to the training received by the SEDES-Beni we think that only the sector of Environmental Reparation was productive, maybe because of the short time or because the people that dictated them should have been more up to date..

#### b) Patient registration and the support received by the doctor

#### NUMBER OF LAB TESTS DONE PER MONTH

Laboratory	September	October	November	Totals
Coproparasitology	6	8		
Glicemy	0	1		
TOTAL	6	9		

The laboratory begins its activities by the middle of the month of September carrying out simple coproparasitologies and glicemia in blood by means of glucometer; we observe a drop in the first place in this service to that we are not making the entirety of the laboratories for lack of some equipment and materials; another factor is the recent operation of the same ones and the economic factor is also of mentioning, although they are the more economic costs in the city. (See annex V results sheets)

#### INTESTINAL PARASITOSIS BY AGE (SIMPLE COPROPARASITOLOGY)

				AG	E GI	ROUL	P					
	< 1 year	ar	1-4 y	ears	5-14	years	15-45		>	45		
							years		yea	rs		
	M	F	M	F	M	F	M	F	M	F	Total	%
Entamoeba				2		1			2		5	33.3%
Histolítica												
Giardia			1	2	1						4	26.6%
Lamblia												
Himenolephys			1								1	6.6%
Nana												
Yeast pores	1										1	6.6%
Chilomastix						1					1	6.6%
Mesnilli												
Abundant	2	1									3	20.0%
leucocitos												
TOTALS	3	1	2	4	1	2	0	0	2	0	15	100%

According to the carried out coproparasitologies we think that our inhabitants are but affected by amoebas, mainly in the group of 1 to 4 years, in < of 1 year the diarrheas of infectious type are frequent; a third place is occupied by the giardia lamblia; we highlight that there are few coproparasitologies carried out, for what this result is not valid

#### c) Epidemiological shield

We work with the VALA (Program of Alert Surveillance and Action); before the immediate obligatory declaration of suspicious cases, qualified health personnel comes to verify the case and to make the respective takings of samples for the shipment from the same ones to CENETROP Santa Cruz (Center of Tropical Illnesses), for the definitive diagnosis.

The sheet of Daily and Weekly Notification for Epidemiological Surveillance include 18 diseases of immediate notification (VALA), which are:

- Measles
- Rubella
- Whooping cough
- Diphtheria
- Acute Flabby paralysis
- Yellow fever
- Hemorrhage
- Cholera
- Bolivian Hemorrhagic Fever
- Typhus Exantematic.
- Pest
- Meningitis
- E.T. Foods
- Illness for Hanta Virus
- Feverish syndrome (it doesn't include the cases of the VALA)
- Bite for Animals
- Disasters and Emergencies.

#### d) Opportunity of the Epidemiological Surveillance

The most frequent thing reported in the course of the 4 months by the Health center is:

- Acute Breathing infections without Pneumonia
- Acute Diarrea Illnesses
- Malnutrition (D-AND-F)
- Anemia
- Arterial hypertension
- Woman with Vaginal Flow
- Acute Breathing infections with Pneumonia
- Symptomatic Breathing
- Chicken pox

We have a patient with lung Tuberculosis that is carrying out treatment in our health center, we have also revised his epidemiological contacts, which don't manifest any sign or symptom; it is possible that more symptomatic breathing exist, but they have not still been captured.

#### e) Quality of the Information

- In September we carried out the immediate notification of two suspicious cases of measles to the area, which notified to the District 0I and this to the department of epidemiology of the SEDES-Beni. We highlight the epidemiology efficiency, since immediately they went to the health center and in company of one of the auxiliary nurses they went to the home of suspicious people and carried out the taking of samples for the same Director, those that correspond went to CENETROP of the city of Santa Cruz.

One of the cases gave negative for measles and the other one positive for rubella in a patient of masculine sex 14 years old; immediately we proceeded to the vaccination in the area to smaller than two years, vaccinating 8 children.

#### **CONCLUSIONS.** -

Making an analysis of the obtained results we can say that we will continue working in:

- Improvement of our Survey/Census according to the age groups and the population in risk.
- Decrease of the morbility in younger than 5 years, making emphasis in the IRA, ADD, Anemia and malnutrition.
- The pregnant women's early reception and to achieve with them a minimum of four prenatal controls.
- To elevate the number of users of birth-control methods and to achieve continuity in the same ones.
- To diminish our prevalence of diseases.
- To improve the detection, treatment and prevention of Tuberculosis.
- To elevate the vaccination coverage.
- To complete the detection of people with higher risk to get certain pathologies.
- To continue with the community activities, making emphasis in the trainings to the clubs of mothers and the traditional midwives.
- The nursing personnel's training in the filling of the SNIS.
- To improve the registration of deaths in the different Local Meetings
- To increase the number of consultations of healthy patients, by way of carrying out a minimum of one control per year in the inhabitants understood among 15 to 45 years and those that have 45 or more.
- To increase the number of healthy children's consultations in smaller than 5 years with control of growth and development and to achieve a continuity in them.
- To make a deep study in respect to the nutritional state of the children smaller than 5 years and to begin the rehabilitation in malnutritioned, anemic and parasitated.
- To promote the use of the condom mainly as prevention of STD in the adolescent youths.
- To prevent the early pregnancies by means of the use of contraceptives, mainly the condom.

We thank to all the institutions that somehow have made possible the realization of this project, is worth to say: The Honorable Prefecture of the department of the Beni, The Honorable Municipal Mayor's office, JICA and the SEDES-Beni; for them the commitment of a lot of work and dedication.

It is important the participation of all these sectors for the development and success of our work, as well as of the collaboration to the maximum of the civic institutions of our area, since without them the project could not be made; for them we request a combined and dynamic work.

Dra.SarahY.GarrónArias General Doctor Dr. Marco Antonio Aponte Larach Gynecologist Obstetrician

Dr. Carlos Arteaga Vaca **Dentist** 

Lic. Pura Cosío Roca Licensed Nurse

Aux. Gladys Ríos **Auxiliary Nurse**  Aux. Aurora Santalla
Auxiliary Nurse

Dra América Torrico **Biochemist** 

# **ANNEXES**

## $MEDICINE\ USE\ (presentation,\ quantity, price)$

Medicine	Presentation	Quantity	Unit Price (Bs)	Total Price (Bs)
Destilled water	Ampoules	16	1	16
Cotton	Package	1	19	19
Amoxicilina	Liquid	15	8	120
Amoxicilina	Capsule	125	0.80	100
Ampicilina	Capsule	50	0.80	40
Ampicilina	Liquid	9	10	90
Antiallergenic	Pills	48	1	48
Antiallergenic	Ampoules	4	13.5	56
Antiallergenic	Syrup	4	12.5	50
Flu remedy	Pills	120	1	120
Flu remedy	Drops	5	20	100
Cipofloxacina	Pills	128	1.60	204.8
Cloranfenicol	Capsules	50	0.50	25
B Complex	Ampoules	20	2.5	50
Clotrimazol	Cream	3	10	30
Cotrimoxazol	Pills	150	0.50	75
Cotrimozazol	Liquid	15	9	135
Dexametasona	Ampoules	3	3	9
Dextrometorfano	Syrup	9	8	72
Diazepam	Ampoules	3	3	9
Diclofenaco	Ampoules	12	3	36
Diclofenaco	Pills	150	0.50	75
Dicloxacilina	Liquid	5	10	50
		10	1	10
Enalapril maleato	Pills	2	12	24
Eritromicina	Liquid	50	1.5	75
Eritromicina	Pills	4	4	16
Vein equipment	Piece	10	1.5	15
Gauze	Envelopes	4	9	36
Gentamicina	Eye drops	3	10	10
Hidrocortisone	Tube			
Stitching thread	Envelopes	1	10	10
Ibuprofen	Pills	150	0.50	75
Syringes	Piece	25	1	25
Ketoconazol	Tablets	70	1.5	105
Lidocaína	Flasks	2	8	16
Mebendazol	Pills	25	0.30	7.5
Metronidazol	Liquid	9	8	72
Metronidazol	Vaginal tablet	70	1	70
Metronidazol	Tablets	75	0.60	45
Nistatina	Vaginal tablet	50	1	50
Paracetamol	Pills	100	0.50	50
Paracetamol	Syrup	15	8	120
Penicilina	Flasks	35	9	315
Benzatínica				
Peniciline	Flasks	16	4	64
Procaínica				
Ranitidina	Pills	50	0.6	30
Glucosa Serum 5%	Dispensing tube	2	10	20
Physiological serum	Dispensing tube	2	9	18
Tetraciclina	Tablets	50	1	50

#### **ACTIVITIES WITH THE COMMUNITY**

Subject	Date	Place	Others	School age	Young	Adults	Leaders	Promoters	TBAs
Municipality and family	2/08/02	Villa Conchita		<u>age</u> 3	10	30	15	10	1
Inauguration of the health center with the japanese ambassador	22/08/02	Health Center		50		150			
Iodine salt	23/08/02	Health Center		10	5	15	1		
Family planning	23/08/02	Health Center			15	30	3	1	
Deparasitation and water purifying	5/09 al 9/09/02	Villa Conchita			29	84	6		
Vaccine importance	16/09	21 de septiembre		6	6	16	1	1	
Health attention model	18 y 21/09	Health Center	20						
Meeting with OTB and Defensoria of the health	20/09/02	Health Center	9			1	7	6	
Blessing of the health center	23/09/02	Health Center	5	20	30	100	5	12	
vides of family health in Japan	27/09/02	Villa Conchita	3	20	25	30	5	12	3
Meeting with OTB La Merced	6/10/02	La Merced				30	1		
Meeting with OTB 26 de Enero	6/10/02	Nueva Trinidad School				20	2		
Meeting with Mothers Club	18/10/02	Health center				13			
Participation in vaccination campaign	23 al 31/10/02	Different health centers							

#### **EDUCATIONAL HOUSE CHATS**

Subject	Date	Families	Houses	Adults	Young people	School age people
Family	3/08 al	271	208	626	264	187
planning	4/09/02					
Purifyed	29/08 al	72	33	130	43	88
water	4/09/02					
Family	5/09 al	130	104	253	136	80
planning	18/09/02					
ARIs,ADDs	18/09 al	153	91	258	106	83
and	21/09/02					
malnutrition						
ARIs,ADDs	21/10 al	123	90	198	79	102
and	31/10/02					
malnutrition						

# NUMBER OF PEOPLE THAT RECIEVED HOUSE CHATS BY THE NURSING STUDENTS OF UTB

	MON	THS
	SEPTEMBER	OCTOBER
SUBJECT		
<b>Environmental health and sanitation</b>	359	267
Chronic illnesses	16	0
Disability	14	0
Growth and development	3	0
Family planning	74	34
<b>Basic Insurance of Health</b>	224	29
Sexually transmitted disease	23	0
Nutrition	86	5
Drug and alcohol addiction	23	0
Papanicolaou	216	0
Parasitosis	84	0
<b>Mother nursing</b>	10	22
ARIs and ADDs	72	12
<b>Enlarged Immunization Program</b>	16	32
Tuberculosis	0	16
Violence	0	3
House health	204	0
TOTALS	1429	420

## PILOT STUDY CS SANTÍSIMA TRINIDAD DE MOXOS

# FINAL REPORT

TO THE MUNICIPAL TECHNICAL COMMITTEE FOR PILOT STUDY

TRINIDAD, JANUARY 2003

## FINAL REPORT TO THE MUNICIPAL TECHNICAL COMMITTEE PILOT STUDY CS SANTISIMA TRINIDAD DE MOXOS

- 1. BACKGROUND. The Health Center of Santisima Trinidad from their operation gave quality attention thanks to their modern attention and complete equipment.
- 2. MEDICAL AREA. The doctor elaborated and participated in all the programs of the Ministry of Health besides carrying out domiciliary visits, also visits to communities without medical attention, he gave educational classes in schools, Mothers Club in different communities, was responsible for the domiciliary fumigation against the malaria in different communities.
- 3. DENTAL CARE. I participate in educational chats in schools besides giving fluoride in school children, slip to communities without dental care for their corresponding attention. It is important that at the moment he carries out all kinds of attentions, since it is had a modern team with affluence of nearby communities.
- 4. NURSING CARE. They participated in very positive form in domiciliary visits, vaccination campaigns, fumigation works for house, educational chats, nursing attentions in a very cordial way.
- 5. LABORATORY. Coproparasitological tests are carried out to most of the population from Santisima Trinidad, especially to smaller than 5 years besides blood test, basiloscopy and other attentions with affluences of all the communities of the sector thanks to that at the present time is counted with a complete equipment.
- 6. PHARMACY. The pharmacy works most with the SBS, being completed the different programs absolutely.
- 7. AREA OF PROMOTION AND PREVENTION. This area is the but important of all the attentions, where it has been carried out promotion and prevention of different illnesses in different levels, with a diminish in the illnesses notably getting a better quality of life.

#### EFFECTIVENESS OF THE PILOT STUDY. -

INTERNATIONAL COOPERATION OF THE JAPAN (JICA). - Our modern C/S of Santisima Trinidad is due to the great support of the government from the Japan. This help is infrastructure or equipment, also training of personal, so much in CENETROP, like in the Japanese Bolivian University Hospital in the laboratory area, Primary Health Care, Hospital Management and basic sanitation.

BOLIVIAN SIDE. - The Prefecture of the Beni, with their counterpart to the JICA Study Team, headed by the Dr. Juan Carlos Sakamoto Paz, made a great contribution to the development of this project, since this team was a fundamental pillar for the execution of the study.

MUNICIPAL GOVERNMENT OF SAN IGNACIO. - They offer their total support to the development of the study and it demonstrated with the recruiting of two Auxiliary Nurses, a Lab Technician and at the moment with the recruiting of personal of cleaning; besides the implementation of lab consumables as well as connection of electric light to the C/S, donation of the land for the construction and the punctuality in the SBS.

NGOs.. - PROSIN whose institution ready valuable cooperation to this study with vaccination campaigns in the whole TIPNIS, with endowment of a glider and offboard engine and fuel, thanks to which it is possible to give the integral attention of health.

USAID. – It carries out great collaboration in the biological ones, preventing this way the bud of serious illnesses.

MINISTRY OF HEALTH. - It makes a contribution of supreme importance with the endowment of 2 item of I doctors, an odontologist and auxiliary nurse.

#### COMPARISON BETWEEN INCOME AND EXPENDITURE

#### 1ST MONITORING OF THE PILOT STUDY

INCOME	CANTIDAD	%	EGRESO	CANTIDAD	%
Services C/S					
Pharmacy SBS	1.000	67	By prescription	800	67
H.A.M.					
Laboratory					
Revolving	500	33	Medicine	400	33
Fund			Reposition		
Others					
PROSIN	3.556		Vaccination	3.556	
			Campaigns		
TOTAL	1.500	100		1.200	100

#### 2ND MONITORING OF THE PILOT STUDY

INCOME	QUANTITY	%	EXPENDITURE	QUANTITY	%
Services C/S	2.130	9	Medicine and	298	1
			consumables		
Pharmacy SBS	2.859	11	By prescription	1285	6
H.A.M.	3.307	13	Lab	3.307	17
			consumables		
Laboratory	75	0		0	0
Revolving	790	3	Medicine	790	4
Fund			Reposition		
Others	5.952	24	Leishmaniasis	4.524	23
			Program		
			Assitance		
PROSIN	9.760	39	Vaccination	9.760	49
			Campaigns		
TOTAL	24.873	100		19.964	100

# COMPARATIVE CHART OF ATTENTION RESULTS OF THE HEALTH CENTER OF SANTISIMA TRINIDAD

INDICATORS	16	er MONITO	ORING	2do		ACCUMULATED	%
				MONIT		TOTAL	
	DOD 4 600	A CHIEFFE			ORING		
	POP. 3.600	ACHIEVE MENT	%	AACHIEVE MENT			
General consultations	1.760	576	33	800	45	1.376	78
New consultations	316	526	169	268	86	794	251
Repeated consultations	316	403	127	337	106	740	233
Dental consultations	1.800	451	25	357	20	808	45
Exodoncies	1.800	96	5	52	3	148	8
VACCINES							
BCG	117	79	67	27	23	106	90
3rd polio	117	53	45	58	49	111	94
3rd penta	117	53	45	58	49	111	94
SRP	80	22	28	55	68	77	96
Tetanus Toxoid	295	147	50	140	47	287	97
ADD <5 años	478	250	52	266	56	516	107
FAMILY PLANNING							
Pílls	144	64	44	65	45	129	89
PREVALENT							
ILLNESSES							
Malaria	25	11	44	4	16	15	60
Sprayed houses	381	120	31	261	68	381	99
Tuberculosis	3	1	33	2	67	3	100
Respiratory Symptoms	36	1	3	5	14	6	17
LABORATORY							
Coproparasitological	700	33	8	638	91	671	96
Blood Test	100	8	8	9	9	17	17
Urine Test	100	3	3	7	7	10	10
Basiloscy	36	3	8	6	17	9	23
Malaria	36	1	3	4	11	5	14

#### COMPARATIVE DATA

1er MC	ONITORING		2do MONITORIN	1G	
ITEM	DISEASE	TOTAL	%	TOTAL	%
1	ARI	190	30	140	33
2	Parasitosis	148	89	78	18
3	Anemia	114	18	63	15
4	ADD	80	13	72	17
5	Pneumonia	25	4	21	5
6	Scabies	24	4	21	5
7	Leishmaniasis	16	2	3	1,7
8	Malaria	6	1	4	1,9
9	Conjunctivitis	16	3	21	5
10	Chicken Pox	7	1	3	0

#### **CONCLUSIONS**

One of the negative factors is that the chain of cold did not work in a sector of the area, what harmed vastly in the coverings.

However it is opportune to stand out that with the total support of the different institutions for the development of the study made that the attentions of health are of more quality rising and improving the quality of the residents' of the TIPNIS life, this it is even the principle of our commitment as protective of the health, since the challenges of the obstacles like the distance and setbacks are to surpass them demonstrating our will and professional generosity.

At the moment it exists the commitment of continuity and sustainability of the project and the personnel for the different institutions, fact that will be undoubtedly a relief to the poverty when happening.

Finally to the whole needy people's of the TIPNIS let you know their eternal gratefulness to the government from the Japan for their unconditional cooperation to Bolivia.

In a same way to the Bolivian government represented in their different institutions, to the NGOs and institutions like PROSIN, USAID, to the JICA Study Team and their counterpart, especially to the manager of the project Dr. Juan Carlos Sakamoto and their team. That in the whole itinerary lived from the beginning of this study they contributed with their grain of sand to obtain these results that summary in a better quality of life.

Dr. Gualberto Campos Ortuño **Area Chief Santísima Trinidad** 

## KENKO-GO MEDICAL BOAT REPORT

# SECOND MONITORING OF THE PILOT STUDIES

**NOVEMBER 2002** 

#### KENKO.GO, MEDICAL BOAT REPORT SECOND MONITORING OF THE PILOT STUDIES

#### 1. BACKGROUND

At national level the Department of the Beni is one of the most extensive, it has a territorial surface of 213.564 Km2. It is approximately on the 155 m. over the level of the sea, with a humid and warm climate in their immense plain. Their main rivers are: the Itenez, the Beni and the Mamoré river. Contrarily it is one of the most underdeveloped.

As logical consequence high indicators of poverty exist, what becomes worse every year with the natural disasters of floods and droughts that affect the quality of life of the communities. Which are isolated by lack of road infrastructures, being the river the only means of communication for the communities that are located to the riverside of the rivers. The infrastructures of health are inadequate and the few ones that exist in the area are very far from the riverside communities and they don't have the equipment and the basic medicines for the attention in health to the residents.

Because of this situation the Catholic Church through Pastoral Social Caritas Beni, permanently executing actions of service to the poorest population of the rural and urban area, but mainly to the population of the Mamoré riverside.

Caritas is an institution of social action and humanitarian attendance of the Apostolic Vicariousness of the Beni. For 40 years it has been executing different actions in this Department in benefit of the poorest people. At the moment it executes some projects like: The Medical boat in the river Mamoré, the Health Center of Pompeya, the project of solidarity "The Good Samaritan" and the Center of Promotion.

#### 2. INTRODUCTION

The conformation of a system in the river Mamoré, with the objective of bringing geographically near the health services, through of an operative unit, seeks to implement a model of integral attention of health with quality and based in principles of the promotion of Primary Health Care, preventive Health and with resolution capacity.

The Medical boat Kenko Go in its first experience with the new infrastructure, through the fluvial system has as objective to improve the conditions of health of the population's of the riversides of the river Mamoré. These populations have difficult geographical, cultural and economic access difficulty to the health services in general and of quality in particular.

The programs that are developed in the Medical boat are:

- General medical consultations
- Vaccination in children and the women in fertile age
- Control of growth
- Quarterly deparasitation
- Biannual Vitamin A intake
- Integral attention to the woman in fertile age
- PAP test
- Pre-natal Control
- Attention of childbirths

- Benefits of the Basic Insurance of Health
- Laboratory: Baciloscopy, thick Drop, Copro parasitology, Glicemia and pregnancy test
- Actions of IEC to the promoters, and community in general
- Household visits
- Control of prevalent illnesses (Malaria, TB, Leishmaniasis, etc.)
- Promotion, prevention and attention in dentistry
- Prevention and health promotion in general

In answer to the order of the Government of the Republic of Bolivia, the Japanese agency for the International Cooperation (JICA), sent a study team in January of the 2001 and the scope of work for the study was signed January 25 2001, the activities of the study began in June of 2001. At the moment it is carrying out the second monitoring of this study.

Once submitted for their administration, the new infrastructure of the Medical boat, KENKO-GO, to Caritas with the whole equipment, the process of training to the personnel began to take the second phase of the pilot study.

The new Medical Boat offers better conditions of comfort for the work; it has a better distribution of the consultation rooms, pharmacy and the cabins for the personnel bedrooms.

#### 3. EVALUATION OF THE EFFECTIVENESS OF THE PILOT STUDY

#### 3.1.1 - INPUTS:

#### a) International Japanese cooperation (JICA)

On the part of the International Cooperation of Japan (JICA): Endowment of a boat with characteristics for attention in health and with dentist, laboratory, nursing equipment, medical equipment, cold chain, complete communication equipment with solar panel and battery, a bed for transitory observation, oxygen equipment and furniture for the consultation rooms.

Training and education for the personnel of health in laboratory handling in the city of Santa Cruz in CENETROP (National Center of Tropical illnesses) and in national programs of health in the city of Trinidad in charge of SEDES Beni.

Support for the coordination and the signature of agreements with the Municipalities and the different concerned Institutions.

#### b). Bolivian side

The Prefecture of the Beni supports to the pilot study with technical assistance trough a team of professionals in charge of the Dr. Juan Carlos Sakamoto.

On the part of the MSPS (Ministry of Health and Social Welfare), an Item for an Auxiliary Nurse.

#### TABLE N° 1

## HUMAN RESOURCES IN THE PILOT STUDY AGREEMENT TO THE FINANCING

#### **ADMINISTRATION 2000 - 2002**

N°	POSITION	NAMES	ADMINISTRATION 2000 - 08 / 2002	ADMINISTRATION 08/02-12/02 ESTUDIO PILOTO JICA
1	DOCTOR	SOLADID M. DIAZ MOREARI	CARITAS	EXTENSA
1	DENTIST	ISMAEL JIMÉNEZ HERRERA	CARITAS	EXTENSA
1	AUXILIARY NURSE	HEYDI CORTEZ DORADO	M.S.P.S	M.S.P.S
1	RESPONSIBLE	VILMA LOPEZ DE IBÁÑEZ	CARITAS	CARITAS
1	MALARIA TECH.	GEOVANNA RIVADINEARI COPA	CRS PROCOSI	EXTENSA
1	MALARIA TECH.	ROLANDO CONDORI CALLISAYA	CRS PROCOSI	EXTENSA
1	PILOT	TOMAS NOE TECO	CRS PROCOSI	EXTENSA
1	COOK	LENNY ARIAS YONIMA	CARITAS	EXALTACION
1	SAILOR	ZOILO ALPIRI CUEVAS	CARITAS	PUERTO SILES

Source: Caritas files

San Javier's, Santa Ana, Exaltation, Puerto siles and San Joaquín are concerned in the project, they have an amount assigned, settled down by percentage according to the population that assists the medical boat. These amount covers 35% of the operative expenses and the support of personnel's ITEMs.

Data of the last census carried out by the INE caused certain confusion of some communities, being the reason for not being able to define with readiness the amount assigned to each municipality.

According to agreements signed on the S. B. S, the Municipal Governments come fulfilling the payments, the only difficulty is the delay of some of the municipalities in the cancellation of the invoices for the medical care given.

(See Annex)

Pastoral Social Caritas, supports with 19% of operative costs, it also supports in the administrative activities, with a coordinating person of the project in Trinidad, the countable work, logistical support with a mobility for the transport of fuel, foods, medicines, etc. In the boat it supports with the generating motor of energy that has the following utilities: operation of the dental equipment, laboratory equipment, distiller of water, the autoclave, centrifugal, audiovisual equipment for educational activities, illumination in the community to carry out the meetings at nights when the case requires it, etc.

PROSIN, supports with 46% of operative cost and it facilitates the coordination with PATFHINDER in the formation work and pursuit to promoters of health.

EXTENSA whose central objective is to reduce the Infantile maternal rate of mortality in Bolivia through of the extension of coverage and quality of the health services, through the strengthening of the local capacity to respond to the necessities of the

population's health, it supports with five items to the health team of the Medical boat, denominating it Brigade of Health (BRISA.).

#### 3.1.2 - RESULT / EFFECTIVENESS

#### (1). Influences of the illness and mortality structure

#### a). Demographic Approach

In the constant search of improving their condition of poverty the residents migrate with a lot of frequency, at the moment communities are reconstituting, previously almost all disappeared. Among these we have the community of the Lipimo and Soverania.

The movement of some communities is subject to the course of the river. As example we have to the community of Navidad that was far from the riverside, reason for which the people decided to move to another place in the riverside of the Mamoré, this with the purpose of transporting their products (Yucca, banana, etc) to places where they can be sold.

In the case of some families the education is an important factor that stimulates to form communities around a school nucleus. Another influential factor in the indigenous migration is the drop production of the earth when this has been intensively used, seeing for convenient to allow it to rest for a good time

Regrettably the women of this area have very few opportunities to be able to overcome, since from very small they assume the role of housewives assigned by the parents, they stay as responsible for the care of their smaller siblings, stealing from them, the opportunity, the time and the enthusiasm of being able to study. It also influences the example of their mothers who don't aspire to but that to only be housewives.

The repercussion is enormous in the health. These girls, expectant mothers, don't get ready to be able to act in opportune form in the illnesses that their children will have in the later thing, situations that sometimes easily could be solved if they had the necessary knowledge.

 $\label{eq:TABLE N^o 2}$  b). Influences of the diseases structure and cause of death

MORBILITY	AÑO	2002	MORTALITY	YEAR	YEAR	
CAUSES	<b>1</b> °	<b>2</b> °	CAUSES	2001	2002	
	monitoring	monitoring				
Respiratory infection	116	172	Respiratory infection	1	2	
Diarrhea	22	42	Diarrhea	0	3	
Parasitosis	77	83	Obstetric complication	1	0	
Hypertension	11	24	Uterine cancer	1	1	
Tuberculosis	0	2	Accidents	1	1	
Skin disease	87	58	Drowning	2	2	
Malnutrition	147	152				
STD	0	36				
Urinary track infection	95	35				
Parotiditis	3	9				

Measles	0	2		
Reumatic fever	5	4		
Cancer	0	4		
Malaria	2	3		
Anemia	48	57	6	9

Source: Health Promoters registration and daily attention registration books

#### Mortality Year 2001.

- 1 < of 5 years with ARI
- 2 drowned
- 1 for firearm
- 1 for Eclampsia
- \* 1 uterus cancer

#### Mortality Year 2002:

- 2 children < of 5 years with ARI and ADI
- 2 children with ADI
- 1 woman > 50 years with ADI
- 2 drowned 1 < of 5 years and 1 > of 25 years
- 1 male for traumatism
- 1 woman with uterus Cancer.

#### c). Accessibility

The geographical characteristics of the area difficult the access of the inhabitants to the health services. The main road that these use is the fluvial one, which is not easy to traffic because the journey is slow and of great cost for the time of permanency in the boats until arriving to the places where centers of medical attention that can solve their problems of health exist.

The Medical boat offers medical care services therefore to these communities which is not permanent, people is forced to solve its difficulties appealing to Santa Ana's Hospitals, San Joaquín, Guayaramerín and in some cases they arrive to Trinidad but with a lot of difficulty.

The economic expense is quite considerable in the case of these people to cover all its necessities of health services; as a result we have unconcluded treatments, because its resources were not enough. Feeling certain relief makes them return to their community.

A problem that exists is the endowment of medicines on the part of the authorities of some municipalities that without previous advice of somebody expert in essential medicines, they submit to the authorities communal medicines without guide, as a result of it self-medication is frequent.

The great help to solve this problem has been to form promoters of health who guide in the appropriate use, but people still continue with the belief that the penicillin is soothing and anti-inflammatory being that this is an antibiotic.

For the people of the community, the work that the new boat carries out is of great relief because it will avoid bigger expenses especially in laboratory analyses.

One of the reached achievements is that the community people goes taking conscience of the necessity of a community for a first-aid kit and also of a person qualified to solve the problems that can be presented in the event of non existing health personnel in their communities.

#### (2) Expansion of the coverage of the health services

#### a) Coverage Expansion

POPULATION BY DISTRICT AND MUNICIPALITY
MEDICAL BOAT KENKO GO

**ADMINISTRATION 2002** 

Table N° 3

District	Municipality	Community number	Population	%
1	San Javier	4	311	9.85
5	Santa Ana	7 + chacos	356	11.27
5	Exaltación	9 + chacos	1006	31.85
4	San Joaquín	3 + chacos	547	17.31
4	Puerto Siles	5 + chacos	939	29.72
	Total	28	3 159	100

Source: Census 2002 Caritas Made by Caritas team

 $\label{eq:control_control_control} \begin{picture}(2000) \put(0.000){$T$ able $N^\circ$ 4$} \end{picture}$  POPULATION BY AGE GROUP AND SEX MUNICIPALITIES OF MAMORE RIVER-2002

				AGE													
MUNICIPALITY	POPU-	<b>\</b>	1		1	2	-4	<	5	5 -	14	15-	-59			Spe.	Spe.
	LATION	M	F	M	F	M	F	M	F	M	F	M	F	WFA	Pregn ant	Births	New born
SAN JAVIER	311	10	8	3	7	23	16	36	31	57	51	69	4	63	12	10	10
SANTA ANA	356	14	6	1	6	22	18	37	30	59	53	102	5	70	13	12	11
EXALTACIÓN	1006	23	22	18	16	54	46	95	84	183	152	284	8	200	38	33	31
PUERTO SILES	939	13	15	21	18	66	56	100	89	163	148	241	16	182	35	30	29
SAN JOAQUIN	547	17	5	8	10	26	25	51	40	94	94	154	6	108	20	19	17
SUB TOTAL	3159	77	56	51	57	191	161	319	274	556	498	850	39	623	118	104	98
TOTAL	3159	13	33	10	08	35	52	59	93	10	54	88	39	623	118	104	98

Source: Census 2002 Caritas Elaborated by Caritas team

#### b) Health support by radio communication system

It is the only means for which the health personnel can stay in communication. With the endowment of a new equipment it improved the communication, since the previous one presented certain difficulties; the utilities of the radio are several: it is used to coordinate the activities with the communities, with the different Health Districts, health area headquarters, to inform in opportune form to the national system of information (SNIS), it denounces cases that require epidemiological investigation, in cases of emergency, consultations of cases in health that the health promoter cannot solve, report from the activities to superior instances and even to contact the health personnel relatives.

#### (3) Changes in the Institution and the Administration

- a) Formulation of the POA
  The POA is annexed in the document.
- b) The Council of Health and the Municipal Committee of Health are instances of the state that do not exercise their functions, or it is ignored which are their activities.
- c) The health team of Caritas has not been affected by the politic influences. Thanks to that the Medical boat is administered by an Institution of the Catholic Church this type of interventions it is not perceived. The personnel's selection was carried out based on the experience acquired in the old boat of Caritas that operated to the endowment of the new ship KENKO-GO. Thanks to this it has been able to have the personnel's continuity for not hindering the pursuit of the activities.

## (4) Changes in the quality of the human resources: changes in the abilities and attitudes of the medical personnel's work

#### a) Days and the personnel's working hours.

The health service is conformed by 1 Doctor, 1 Odontologist, 1 Nurse assistant, 2 Malaria Tech.; it has a support team also, the commander pilot, sailor and cook

It is difficult to be able to take out an exact time of the personnel's work, due to the difference with the public services that complete a fixed schedule of attention. The case of this personnel is that established schedules cannot be respected, neither to stop to work on Saturday, Sundays for the extension characteristics and dispersion of the area, fact reflected by the time of permanency in each journey.

#### b) Quality of Services for patient of the medical personnel

The personnel with which it counts have a particularity: the considerable time that they come working. It influences this so that it has achieved bigger trust and acceptance in the communities, it has advanced diminishing the shame little by little, the fear of the women, the lapsed time has also allowed to know people's problem, in certain way an affective nexus has been achieved between the personnel and the community.

The new health care model application has achieved bigger affluence from people to the consultation, fact that can be demonstrated with the quantity of Papanicolau (test), the number

of medical and dental consultations was also increased in relation to the previous trip, due to the effort of the whole personnel that has motivated people so that it attends the consultation.

#### c) Payment Problems for the different contract types

The contract with the EXTENSA project doesn't complete the payment of salaries regularly, it is important to point out that it existed delay of 1 and a half month for the cancellation of the first salary. On the other hand a lot of problems exists as for the law taxes, for the type of financial handling that demands the World Bank as requirement for this activity type.

#### d) Attitude and motivation of the health team

At the beginning of the Project the whole personnel was very motivated to work, for the increase in the wage, at the moment the motivation got lost when analyzing the clauses of the contract with EXTENSA, where it consists that they won't cover, with the contributions of the social benefits, Christmas gifts, Fund of Pensions (AFP), insurance against accidents, etc. These aspects even leave the monthly wage of some workers lower in relation to that before beginning the pilot study.

In the health team good coordination and support in the activities exist, that which facilitates to take a work in harmony and the interesting thing is that all the members share the same likeness in the objectives of offering an attention of warmth and quality, conscious that we should help to our country to improve in the health system. All of us are willing to contribute to develop an integral health system in the department of the Beni

When they evaluate people who work in health, either in national, regional or local health it is carried out based on coverage but they never take into account the warmth, quality of health care services and neither consider the difficulties that one has to spend to achieve the objective and their programmed goals.

#### (5) Financial resources

 $\label{eq:concerning} \textbf{Table N}^\circ \, \mathbf{5}$  a) Shared Costs among the concerning agencies for operation

N°	HUMAN RESOURCES	MONITORING 1	MONITORING 2	FINANCERS SECOND MONITORING
(1)	SALARY			
1	DOCTOR	3.270,00	5.740,80	EXTENSA
2	DENTIST	3.000,00	3.532,80	EXTENSA
3	AUXILIARY NURSE	1.200,00	1.206,00	TGN
4	MALARIA TECH	1.900,00	2.060,80	EXTENSA
5	MALARIA TECH	2.200,00	2.060,80	EXTENSA
6	PILOT	1.183,00	2.060,80	EXTENSA
7	SAILOR	862,00	1.296,29	MUNICIPIOS
8	COOK	783,00	1.296,29	MUNICIPIOS
(2)	OTHER OPERATION COST			
1	FUEL	9.792	9.792	PROSIN 46 %
2	FOOD	12.000	13.200	CARITAS 19 %
3	MATERIALS	681,00	681,00	MUNICIPIOS 35 %
4	OTHERS	550,00	550,00	
	TOTAL	37.775,50	43.477.58	

Seemingly when seeing the quantities of the salaries in the table, a great salary increment is observed, but if we analyze the salary from EXTENSA they are included: the Christmas bonus, quietus, law taxes, health insurance and contributions to the bottom of pensions, employer contributions, being a payable liquid below that earned before.

In the sailor and cook salaries they are also included the employer contributions, since these are included in operation costs. The sailor and the cook have an increment for reasons of their support, apart from their specific work, as part of the Brigade of Health.

#### b) Financial States

TABLE N° 6

INCOME	TRIP 1	TRIP 2	EXPENSES	TRIP 1	TRIP 2
Medical consultation	0	0	Medical consumables	180.20	250.00
FERUM and injections	20.00	60.50	Healing material	98.00	170.30
Dentistry	1970	2001	Dental material and consumables	1520.50	1747.5
Basic Insurance of Health	2.652	3.544	SBS Medicine	2.532	3.296,5
Pharmacy	7117,10	9.460	Revolving fund medicine	6.560	8.616,85
<b>Medicine leftovers</b>	5.449,80	5.488,90	<b>Donations and loss</b>	287.60	138.00
Others			Clearing material	55.60	267.00
TOTAL	17.208,9	20.554,4		11.233,9	14.486,15

#### (6) Use of the health units and medical equipment

#### a) Technical Problems

- With the new equipment we had some difficulties:
- The refrigerator of the cold chain has not worked appropriately; the temperature was not stable for the maintenance of the vaccines.
- Some materials were not practical for the laboratory work; the equipment is not complete (it lacks a micro centrifuge).
- The endowment of a bicycle is not enough for the work of the team, since they are 6.
- We notice as difficulty the noise generated by the motor of light, producing an acoustic contamination for the personnel.
- According to the commandant's report, the lack of batteries has been another
  important difficulty for the operation of the motor, the radio and the supply of light,
  that makes that the generator is more time in operation, causing more noise and high
  expense of gasoline.

### Dental equipment

#### Difficulties:

- In modulating the thread of adaptation of one from the tips to the micro motor it doesn't complete their function,
- The amalgam carrier does not work; one of the wheels of the revolvable seat doesn't touch the floor.
- The furniture in spite of their short operation life already began to be oxidized by lack of a cover with anticorrosive painting.

#### b). - Solution ways in cases of technical problems.

To solve the problem of the cold chain the refrigerator of the kitchen was used to freeze the *frigos* and to maintain the vaccines in good state.

The lack of means of transport in the event of distant communities was solved walking on foot for several hours what increases the time of permanency in each one of them.

In the dental part some problems were provisionally solved with the loan of instrumental of Caritas and other they could not be solved to be factory problems.

#### c). - Future Requirements:

To improve the operation of the refrigerator for the cold chain

To endow of a micro centrifugal for the laboratory.

To endow of more bicycles for the team

To endow of 4 batteries

To improve the painting of the furniture so that they don't deteriorate so soon.

Training and constant bring up to date for the personnel

Material required by dental clinic: lamp of halogenous light, shelf for inputs and instrumental, forceps for molars (Inferior, left and right), elevators (Right and angular) bone file. For obturations it is necessary of medium and small amalgam *atacadores*, mortar for amalgam mixture; Tray to sterilize the instruments

### (8).- Distribution and uses of medicines:

# a) - Provision of medicines: Administrative process and financing by the Municipal Government

The pharmacy that exists in the Medical boat works with a starting capital that was given by Pastoral Social Caritas to the beginning of the project. To achieve the sustainability a revolving fund is managed. The medicines are sold to cost price to the consumers, they are charged cash and products according to the case. This work system has as main objective to achieve the users to be responsible and aware of its health.

The medicines of the SBS stay with that collected by the invoices emitted to the Municipalities (CAPO).

# b). - Purchase of medicines for the Medical boat: Class and quantity of each medication.

To request the medicines according to the KARDEX. That is managed with the modality of registration sheets. The purchases are carried out of the CEASS, of the Pompeya Health center, of laboratories TERBOL and sometimes of laboratories INTI

# c). - Buy, storage and distribution of the medicines to the inhabitants: control of time and quality to know the order for the medical personnel.

The conditions of storage of the medicines were precarious, good infrastructure didn't exist (furniture, etc). These conditions have improved in the new Medical boat.

(See Annex)

The national health policies don't cover in efficient form the requirement of a good health care service. We hope this is overcome in the course of time; therefore each inhabitant should still be responsible for his total well being in comparison to other countries where the health is covered with funds of the state.

#### d). - Solutions in the event of technical or logistical problems:

In the event of lack of medicines, it is coordinated by radio with the responsible for health so that from the central office they make the necessary shipment via air or terrestrial to Santa Ana or San Joaquín.

#### 9).- Changes in the referral system

#### a). - Referrals, criteria, forms, colleting system, opportunity:

It is had all the referral and counter referral forms. In this last journey it was fulfilled to derive the patients that needed emergency cares, specialty for of slow evolution or those who required pursuit to lingering treatments.

But regrettably the patients not always fulfill that indicated, because they don't have the available economic resources. The costs of the transport of fluvial type are expensive, one of the reasons that don't allow this reference flow. The patients that fulfilled the referral will be able to be evaluated in the next trips.

The hospitals with those that are counted for the referral are Santa Ana, San Joaquín, Guayaramerin and Sorpresa (Health Post of the neighboring country Brazil)

One of the main difficulties for access to the health services is the bureaucratic step that for norm one has to complete in these reference levels. This affects the patient that are attended with the hope of being assisted with readiness, vastly they get tired of the whole time of wait, being frustrated, when not being resolved their problem in an immediate way, losing this way trust in the health service for the later thing.

#### b). - Management and pursuit of patient:

Through the radio communication system, the health promoters and the health personnel are able to take this activity ahead in some situations. In the event of cancer and other, the patients are transported in the medical boat to the city of Trinidad. Thanks to the project of help of Caritas through Mrs. Vilma López it is possible to solve in most these cases.

#### c). - Accessibility, means of transport, conditions of roads, radio communication system:

For the geographical conditions of the area, the only road trafficked during the whole year is the fluvial one, only in dry time some roads are passable, which are not under good conditions, but you can use in necessary cases.

#### (10) Changes in the PHC and the community health system:

The training received in the city of Santa Cruz in CENETROP has allowed the health staff to largely enlarge the coverage of health care services in the medical boat, the time of training has been insufficient to acquire experience in the handling and analysis reading in laboratory, having enough doubts in the moment to give a final result as for this, therefore the responsible personnel needs to acquire bigger practice and experience for good services.

#### a) Attention model to the family and community:

Previous coordination, the work pattern adopted by the team of the boat is of making all the benefits get to the homes of the families seated in these communities with the following attentions: doctor, dentist, nursing, promotion activities and prevention with the household chats.

As part of the educational activities with the community, it was coordinated with a consultant of the PATHFINDER project who accompanied us part of the journey, supervising the work of the health promoters who are in training process. The training instrument that they have used is the booklet TAKE CARE! A GUIDE OF HEALTH AND WELL-BEING (content: three Modules, 1) family and communication, 2) sexual and reproductive health, 3) safe maternity). It is also informed to the community people about natural family planning.

The household visits in the communities have different objectives: to be able to know the reality of each one of the families, to achieve their trust, acceptance, certain degree of affection, besides supervising the cleaning, the state of the housing and to mention to meeting to the whole community. Once this activity is concluded we take the education meeting with topics according to the necessities of the community.

Concluding the work in the community, the cases that require consultations are assisted. taking of PAP, obturations, etc

Table N° 7
Activities with the communities

Population: 3.159 inhab.		
$N^{\circ}$ families: 526 families		
N° communities: 28	Quantity	%
N° health promoters: 27		
House visits	320	62
Community meetings	21	75
Health volunteer leaders training	24	89

Caritas registration file

#### b) Program: AIEPI, ARIS, PAI and PCED

All the National Health Care Programs are taken ahead with the integral attention to the boy smaller than 5 years. This begins with the control of growth and development, application of vaccines, deparasitation, vitamin A administration, dental exam and in the event of illness he/she is carried out a clinical examination.

c) The household visit takes advantage to give education to the women in fertile age in the topics of STD, PAP test and other ones, in a same way pregnant women are captured, inviting them to carry out their control, noticing them of the dangers of the maternity and the childbirth in the event of having its son in the community.

The dentistry activities begin with campaigns of dental examinations to all the people in their home

#### d) Traditional Medicine:

Not having another class of medical care services in the communities from remote times has allowed to conserve the traditional culture of curing the illnesses with the help of natural herbs. Respecting their tradition, the health promoters are incentivated in the use of masterful preparations that are in a book edited by two Swiss supporters who rescued experiences of the use of the different plants characteristic of the area.

#### (11). Influence of the SNIS / epidemiological prevention

a) The training in CENETROP is profitable, but as it was already mentioned, we request to consider bigger time of training or if it was possible, to include to the team a biochemical professional that manages with more approach the laboratory of the boat.

The training of the SEDES BENI was not completely taken advantage of, because some of the topics didn't fill the expectations expected by the health staff.

#### b) Patient registration and support received by the doctor

Once the attention in the community is concluded, at night all the instruments are revised and the data is gathered, then these are transcribed to the systematizing notebooks and forms of ambulatory attention of the SBS. Once concluded the work in a municipality, they consolidate the information in the forms of the SNIS to be given to the responsible for each area and / or district.

The billing of the SBS (Attached Certificate of Granted Benefits), it is submitted to the responsible for health of Caritas who sends it to the different municipal governments.

#### c) Epidemiological shield

The implementation of the new laboratory allows to strengthen the system of the epidemiological shield, mainly in the cases of tuberculosis and malaria.

In the last journey one could detect positive bacillus. The respective notification of these cases was made to the municipality that would take charge of making the pursuit of the treatment of these cases.

#### d) Opportunity of the epidemiological surveillance

The flow chart required by the system of surveillance is completed at the moment due to the different levels of health.

So far we have not had any epidemiological outbreak in the work area so we cannot make comments of the operation of this system. But all the forms are fulfilled.

#### e) Quality of information

The information that takes place in this health service (Medical boat) are data that are extracted directly of the established systematizing notebooks by the ministry of health, they are processed, confronted, consolidated and analyzed, to be appropriately correspondents to corresponding municipalities, areas and districts of health.

#### **CONCLUSIONS:**

We finish this report manifesting our concern arisen in the many difficulties that have been had to confront for the execution of our objectives.

Lack of payment to carry out the first trip. Although the obligations of each counterpart had settled down to cover the financing of the trips, one of the counterparts, EXTENSA, went announcing their project of creation of the brigades of health, one of those which will be dedicated to the medical boat. This brigade began to have validity starting from August 1. Until then Caritas without having the security of the conformation of the brigade and the commitment of EXTENSA of coverage the costs of wage of the same one, could not commit in a projection of activities made for the future, reason for which PROSIN requested us a work plan, who could not pay its counterpart for the trip.

Awaiting that EXTENSA formalized their commitment and with the desire of beginning once and for all with the Pilot study that was already suffering delay, Caritas made an effort and it undertook the first trip without the help of EXTENSA neither of PROSIN, the trip lasted from April 29 to June 17. The surveys programmed by JICA for the Pilot study were carried out.

The Health Brigade received successive training courses for its work. Finally September 16 could undertake the second one, it already travels with the support of EXTENSA and

PROSIN and the promise of execution of their obligations on the part of the municipalities. This trip has lasted up to November 9.

Another point that has just been defined and that brings us difficulties when settling down the amount of the payments that correspond to each municipality, is that the ownership of some communities to their corresponding municipality is not clear, that makes to be varying the percentage from their contribution to the project.

We believe that Caritas have put all their effort and responsibility in the execution of their obligations. We want all these difficulties to be solved so that Caritas can continue maintaining this service to our rural siblings of the riversides of the Mamoré to whom we owe us for the commitment acquired by Pastoral Social Caritas Beni.

We request to JICA that it continues in the measure of their possibilities supporting in all that means training and constant professional bring up to date of the Health Brigade of the Medical Boat.

JICA gave a bicycle for the displacement of the brigade from the ship to some communities that are at distance of the river. It is not enough because the whole brigade moves to complete its mission in these communities.

We also worry about the quick deterioration the equipment suffers for the climatic humid atmosphere, what will force to more frequent and more expensive maintenance by technical experts in the matter.

We request to the municipalities speed up their payments.

God willing EXTENSA can also be punctual in the payment of their counterpart, because the components of the brigade are people that have to sustain to their families while they are in their work in the Medical boat. We want to make an objective analysis of the new contract to be carried out once conquering the current one.

To conclude with this report we thank to the Japanese government for the trust deposited in Caritas for the administration of this project, we also thank to the teams of JICA and of the Prefecture for the borrowed support for the implementation of this project with all their benefits and difficulties.

# **ANEXXES**

1.- Maps of the Mamore River:

Politic

District
Accesibility
2.- Budget Detail
3.- Attention and Programming Table
4.- POA
5.- Functions Manual
6.- Pictures of the Work Done

**N°** 1

## AMBITO GEOGRAFICO DE INTERVENCION KILOMETRAJE Y TIEMPO BARCO DE SALUD-2002.

N°	COMUNIDADES	POBLACIÓN	TIEMPO DE UNA COMUNIDAD A OTRA	KILOMETROS DE UNA COMUNIDAD A OTRA	TIEMPO DE VIA JE DE TRINIDAD A LAS COMUNIDADES	KILOMETROS DESDE TRINIDAD A LAS COMUNIDADES	
1.	Salida desde Puerto Almacen	0	0:00	0:00	0.00	0:00	
2.	Villa Chica	64	22:00 Hrs.	110	22:00 Hrs	110	
3.	Bambuces	64	30 min	1	22:30 Hrs	111	
4.	Tejerías	104	7:00 Hrs	35	29:30 Hrs.	146	
5.	Toboso	79	1:30 Hrs	8	31:00 Hrs	154	
6.	Soberania	26	1:40	8	32:40 Hrs	162	
7.	24 de Agosto- Navidad Rampla	129	6:20	29	39:00 Hrs	191	
8.	Lipimo	98	1:00 Hrs	5	40:00 Hrs	196	
9.	Bella Flor	329	1:30 Hrs	7	41:30 Hrs	203	
10.	San Jorge del Mapajo y 18 de Noviembre	103	1:00 Hrs	5	42:30 Hrs	208	
11.	Buen Día y Chacos	99	1:50 Hrs	8	44:10 Hrs	216	
12.	20 de Enero y Carnavales	153	3:40 Hrs	17	47.50 Hrs	233	
13.	Bocorondo	103	7:40 Hrs	37	55:30 Hrs	270	
14.	Puerto Santiago	74	3:30 Hrs	18	59:00 Hrs	288	
15.	Trompillo	197	2:00 Hrs	10	61:00 Hrs	298	
16.	Puerto Siles y Altura el Carmen	214	7:00 Hrs	35	68:00 Hrs	333	
17	Cooperativa y Chacos	205	3:30 Hrs	18	71:30 Hrs	351	
18.	Peñitas de Nazareth	107	2:00 Hrs	10	73:30 Hrs	361	
19.	Lago Bolivar	125	5.50 Hrs	28	79:20 Hrs	389	
20.	Villa Jesus de Nazareth	68	3: Hrs	17	82:20 Hrs	406	
21.	Santa Rosa de Vigo	267	2:40 Hrs	15	85:00 Hrs	421	
22.	Alejandría y Chacos	333	7:00 Hrs	35	92:00 Hrs	456	
23.	Monte Azul	166	9:00 Hrs	45	101:00 Hrs	501	
24.	Vuelta Grande	52	3:00 Hrs	15	104:00 Hrs	516	
TOTAL 3.159 104 Hrs 516 km.							

FUENTE: Comandante del Barco de Salud

*N*<sup>•</sup> 2

## COMPARISON CHART OF THE OBTAINED RESULTS DURING THE 1ST AND 2ND MONITORING MEDICAL BOAT - 2002

	1° MONITORING				2° MONITORING			
INDICATORS	POPUL 40 Prog.	ATION 48 %	ABSOLUTE NUMBER GOTTEN	%	ABSOLUTE NUMBER GOTTEN	%	ACUMULATIVE TOTAL	%
EXTERNAL CONSULTATION								
General Consultation	2834	70	899	32	1102	37	2001	70.60
New consultation < 5 years	510	90	320	62.74	529	103.72	849	166
Referred medical consultation			0		4		4	
Dentist consultation/100 inhab.	2024	50	107	5.28	819	40.46	926	45.75
Dental care number	405	10	78	19.25	89	21.97	167	41.23
INTEGRAL HEALTH IN CHILDREN < 5 YEARS								
Control to children < 2 years	230		191	83	177	76.95	N/A*	
Control to children 2-4 years	336		309	91.96	302	89.88	N/A*	
Malnutrition prevalence	122	24	148	29	157	32.77	305	31.15
Only dose of BCG new born	116	100	20	17.24	4	3.44	24	20.68
1° of Polio – PENTA	116	100	39	33.62	16	13.79	55	47.41
2° of POLIO – PENTA	116	100	34	29.31	34	29.31	68	58.62
3° of POLIO - PENTA	116	100	17	14.65	22	18.96	39	33.62
SRP only dose 12-23 months	114	100	28	24.14	22	19.29	50	43.83
1°-2°- 3° of POLIO – DPT from 1 to 5 years	450	100	80	17.77	37	8.22	117	26
< 5 years with 1st iron dose	567	100	113	19.92	180	31.74	293	51.67
< 5 years with 2nd iron dose	283	50	39	13.78	85	30.03	124	43.81
Intake of 1° Vit. "A" from 1-4 years	437	97	212	48.51	191	43.70	403	92.21
Intake of 2° Vit. "A" from 1-4 years	315	70	146	46.34	192	60.95	338	107.3
Intake of Vit. "A" from 6 to 11 months	116	100	58	50	37	31.89	95	81.89
ADI cases <5 years	1701		18	1.05	42	2.46	60	3.52
ARI cases <5 years	1701		23	1.35	172	10.11	195	11.46
INTEGRAL ATTENTION TO WFA								
Prenatal control coverage	135	90	27	20	73	54	100	74
Pregnancy control before 5 month	81	60	16	20	15	18.51	31	38.27
Pregnancy control alter 5 month	54	40	11	20	13	24	24	44.44
Women with 4 prenatal control	116	85	1	0.86	1	0.86	2	1.72
Puerperum control	66	50	21	31.81	7	10.60	28	42.42
2° Dose TT to WFA	332	33	55	16	37	11.14	92	27.71
Natural family planning	502	50	98	19	27	5.37	125	24.90
Sample of PAP to WFA	302	30	40	13.24	91	30.13	131	43.37
PREVALENT ILLNESSES			-					
Malaria cases	41	1	4	9.75	3	7.31	7	17.07
Sprayed houses			112		0		112	
TB cases	41	1	0	0	1	2.43	1	2.43
RespARItory symptomatic	405	10	3	0.74	11	2.71	14	3.45

#### Source:

<sup>\*</sup> Data obtained from the established percentages for each age group for MSPS

<sup>\*</sup> External consultation registration book - SNIS

<sup>\*</sup> N/A can not be summed up because the number of controlled children would double up.

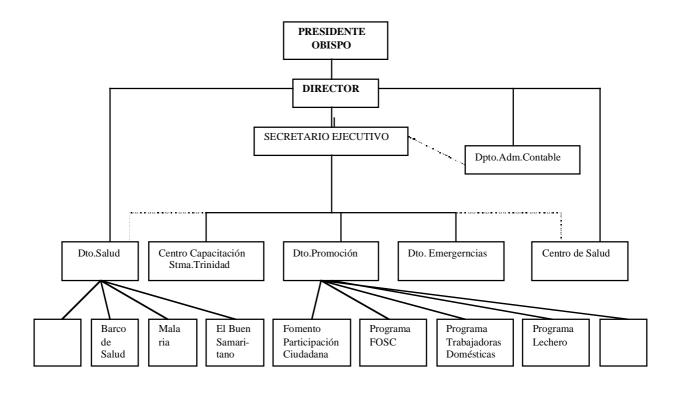
# MANUAL DE FUNCIONES

# PASTORAL SOCIAL CARITAS BENI

Trinidad – Beni – Bolivia

### **ORGANIGRAMA**

#### PASTORAL SOCIAL CARITAS BENI



#### **ORGANIGRAMA**

### BARCO DE SALUD "KENKO-GO"

