ICDOR B LIBRARY

Date

ETHICAL RE LEW COMMUTENAKARRAR, B.

Pri ripal Investigator Dr. Syed Md. Trainee Investigator (if any) Application No. Supporting Agency (if Non-LCDDR, B) ritle of Study A study of patients with Project status: Streptococcus Pheumoniae bacteremia seen New Study Continuation with change at ICDDR,B Dhaka Hospital. No change (do not fill out rest of form) Circle the appropriate answer to each of the following (If Not Applicable write NA).

Source of Population:

Will signed consent form be required: (a) Ill subjects From subjects

(b) Non-ill subjects From parent or guardian (b) (c)

Minors or persons (if subjects are minors) (Yes) No under guardianship Will precautions be taken to protect Doos the study involve:

anonymity of subjects (Yes) No (a) Physical risks to the Check documents being submitted herewith to

subjects Yes Committee:

(b) Social Risks Yes

Umbrella proposal - Initially submit an

(c)

Psychological risks

overview (all other requirements will

to subjects - Yes

be submitted with individual studies; (d) Discomfort to subjects Yes

Protocol (Required) (e) Invasion of privacy Yes No "Abstract Summary (Required) (f)

Disclosure of informa-Statement given or read to subjects on tion damaging to subnature of study, risks, types of quest,

ject or others Yes (No ions to be asked, and right to refuse Does the study involve:

to participate or withdraw (Required) Use of records, (hosp-Informed consent form for subjects

ital, medical, death, Informed consent form for parent or birth or other) Yes) No

guardian (b) Use of fetal tissue or Procedure for maintaining confidential-

abortus Yes (6)

Use of organs or body Questionnaire or interview schedule * fluids Yes) * If the final instrument is not completed Are subjects clearly informed about:

prior to review, the following information Nature and purposes of should be included in the abstract summary tudy A description of the areas to be

(b) Procedures to be covered in the questionnaire or followed including interview which could be considered alternatives used No either sensitive or which would

(c) Physical risks (No) Yes constitute an invasion of privacy, (d)Sensitive questions (NO Examples of the type of specific

(e) Benefits to be derived questions to be asked in the sensitive (f) Right to refuse to

participate or to with-An indication as to when the questiondraw from study

naire will be presented to the Cttre. (g) Confidential handling for review. of data (h) Compensation 8/or treat-

ment where there are risks or privacy is involved in any particular procedure Yes No (PTO)

we agree to obtain approval of the Ethical Review Committee for any changes involving the rights and welfare of subjects before making such change.

kkromuzzaman i Principal Investigator

Traince

SECTION I - RESEARCH PROTOCOL

87009P 29/3

1. TITLE : A STUDY OF PATIENTS WITH

STREPTOCOCCUS PUNEUMONIAE

BACTEREMIA SEEN AT ICDDR.B

DHAKA HOSPITAL.

2. FRINCIPAL INVESTIGATOR : Dr. Syed Md. Akramuzzaman

CO-INVESTIGATOR : Dr. Mahbubur Rahman

Dr. A.N. Alam Dr. D.A. Sack

CONSULTANT : Dr. John S. Spika

3. STARTING DATE : April 16, 1987

4. COMPLETION DATE : October 15, 1987

. TOTAL DIRECT COST : US \$ 4674.00

6. SCIENTIFIC PROGRAMME : Epidemiology and Laboratory

Sciences Division

This protocol has been approved by:

Signature of the Programme Head: ---

Date: 23.3.87

7. ABSTRACT SUMMARY

Streptococcus pheumoniae caused 20-25% of bacteremia seen at ICDDR,B Dhaka Hospital during February to April, 1985 and 1986. Preliminary information suggests that 25% of these patients with pneumococcal bacteremia may have a bacterial enteric pathogen identified in their stool, the majority of these are Shigella sp.

The purpose of this study is to define the number of patients with clinically and radiographically diagnosed pneumonia seen at ICDDR,B Dhaka Hospital and to look for risk factors for acquiring pneumococcal bacteremia using a case-control study design.

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- b. Research Review committee: -----
- c. Director, ICDDR,B:

SECTION II - RESEARCH FLAN

A. INTRODUCTION:

Acute lower respiratory tract infections (ALRI) are a major cause of illness in children of developing countries (1). A review of causes of death in the ICDDR, B's Matlab Demographic Surveillance System (DSS) for the years 1975-79, found that ALRI was the fourth greatest cause of mortality among children less than 5 years of age (2). We have recently analyzed the reports of children, 1 to 59 months of age, from the ICDDR, B's Teknaf DSS area for the years 1982-85. ALRI, the leading cause, contributed to 29% of the death during this period (Spika JS, Munshi MA,, Wojtyniak B, et al., manuscript in preparation).

Streptococcus pneumoniae is thought to cause a large proportion of serious and fatal ALRI in children (1). Little is known about agents causing ALRI in Bangladesh. The ICDDR, B is currently participating in the Bostid study which selects a small number of ALRI—patients—to—study—intensively—with—microbiologic—and virologic cultures of blood and the nasopharynx. S. pneumoniae was the most frequent pathogen identified from blood among the first 100 patients enrolled (Rahman M, personal communication).

A review of the blood culture isolates at ICDDR, B Dhaka Hospital from January 1985 to October 1986 (figure) identified 67 patients with <u>S. pneumoniae</u> isolated from blood in 1985 and over 63 cases of pneumococcal bacteremia in 1986. Fifty-seven percent of isolates were identified during the months of February to May.

How many of these patients had diarrhoea and whether the pneumococcus may have contributed to the diarrhoeal symptom, if present, is unknown. S. pneumoniae can cause peritonitis (3), appendicitis (4) and enteritis (5). S. pneumoniae has been found in stool specimens (7); however, the use of standard microbiologic techniques for stool will would not permit their identification.

Struelens and coworkers investigated bacteremia associated with diarrhoeal illness at ICDDR,B Dhaka Hospital during the period Occtober 1982 to August 19883 (8). S. pneumoniae was the third most common blood isolate, accounting for 40 (12%) pathogens identified from 1824 patients cultured. Records were available on 39 patients with pneumococcal bacteremia. The median age was 1 year (range 2 months to 40 years of age); 7 (18%) patients were less than 6 months sof age, 2 (5%) were less than 3 months and 2 (5%) were >18 years. Twenty-six (67%) of 39 patients had a chest radiograph and 17 (65%) of . 26 interpreted to shown pulmonary infiltrates (Bennish M, These patients had a 2:7 x greater chance of communication). dying than did non-bacteremic controls who also had diarrhoea. Nine (23%) of 39 patients had a bacterial pathogen isolated from shiqellosis stool: 6 of these were Shigella sp. Whether could have been a risk factor for the S. pneumoniae bacteremia is an intriging question.

Twenty-five to 33% of pneumococcal pneumonia in adults will be associated with pneumococcal bacteremia (9); however, this incidence may be lower in children (10). Occult or "walking" bacteremia in children caused by <u>S. pneumoniae</u> have also been described in North America (11) and the United Kingdom (12). Children with occult bacteremia typically are less than 4 years of age and have temperatures >38.5 C with no focus of infection, although they may go on to develop pneumonia, soft tissue infection or meningitis (13). Using quantitative blood culture techniques, some investigators have been able to differentiate between children with transient bacteremia and those likely to develop a persistent focus (14).

The number of patients with pneumococcal bacteremia seen at ICDDR, B Dhaka Hosptial would permit a study to define illness and risk factors for this disease in Bangladesh. The information gained would be helpful for planning futrue strategies for the treatment of ALRI and dirrhoeal disease.

B. SPECIFIC AIMS:

The objectives of this study are to answere the following questions:

- 1. What proportion of children admitted to ICDDR,B Dhaka Hospital during the months of April to October have clinically or radiographically diagnosed pneumonia, or S. pneumoniae bacteremia?
- What are risk factors for pneumococcal bacteremia and pneumonia among patients hospitalized at ICDDR, B Dhaka Hospital?

C. METHOD! OF PROCEDURE:

All patients admitted to ICDDR,B Dhaka Hospital during months of April to October 1987 who one atleast months but less than 19 years of age will be eligible for this study. Patients with clinical findings suggestive of pneumonia such as fever (temp. between 38 and 41 C), chest pain and tenderness, asymetric and rostricted movement of. retractions, subcostal intercostal and wall. tachypnea, flaring of alae masi, diminished breath sound or crackles or bronchial breath sound will have a chest radigraph performed and a 1.5 ml sample of venous All patients less than 4 years of taken for culture. with a temperature > 38.5 but without pneumonia or source of infection will also have a blood opther obvious culture done. Rectal swab for culture and sensitivity all patients will be sent on admission. A patient with pneumonae isolated from blood will be identified as a case.

A case with no obvious source of infection will be reevaluated to find out a focus of infection by examining
carefully the ears, throat, chest, skin, soft tissue,
joints and bones and if there is any suspicion of meningitis
a lumber puncture will be done for cytolosy, biochemistry
and culture of CSF. All cases will be treated with a full
course of intravenous erytalline penicillin or with the drug
according to the sensitivity. All cases and controls will
be treated adequately for diarrhoeal and other associated or
underlying illnesses.

With permission, the case or cases family will be interviewed according to the questionarie about the type and duration of diarrhoeal and respiratory symptoms; smoking in the home, diet (including frequency of breast feeding if applicable); sleeping arrangements; location, type and size of dewlling; fuels used for cooking and light; number of persons in the household; and immunity to mealses and portusis. Height, weight and mid-arm circumference will be obtained.

Following the identification of the case patient, the next two patients of similar age and the same sex admitted to the hospital who do not have pneumonia, will be selected as controls. The age criteria for matching cases and controls will be: for an infant (<12 months) — another infant; for a 12-23 month old child-another child in that age range; for a 2-5 year old ± one year of age but at least 2 years of age; for a 6-12 years old ± 3 years of age but at least 1east 6 years of age; for a 13-18 year old ± 5 years of age but at least 13 years of age. If permission is obtained, the control patients or their families will be interviewed using a questionnaire similar to that used for the case patients.

The number of case-patients will be compared with the number of patients admitted to the hospital and the number with pneumonia present clinically and on chest radiograph. Case patients will be compared with controls using Fisher's exact and chi-square tests.

If we enroll 32 case and 64 control-patients we will be able to detect a relative risk of 3.5 between cases and controls if our incidence among controls is 0.3 using = 0.05 and =0.2.

D. SIGNIFICANCE:

F.

Disease caused by <u>S. pneumoniae</u> is a major cause of death in the world among young children. The information obtained from this study would help as understand the epidemiology of pneumococcal disease in Bangladesh and possibly its association with enteric bacterial pathogens.

FACILITIES REQUIRED:

- Office space : No extra space is required.
- Laboratory space: Existing ICDDR, B lab. facilities
 will be used.
- 3. Hospital resources: Existing facilities of general ward will be used.
- 4. Animal resources: Not required.
- Logistic support: Data processing and computer support from Data Management Branch of ICDDR, B will be necessary.

- Transport facilities: Existing transport facilities
 will be used.
- 7. Major items and equipments: Nil
- 8. Others: Nil

. COLLABOATIVE ARRANGEMENTS:

Dr. J. Spika will act as a Consultant of the study.

REFERENCES

- 1. Riley ID, Eveningham FA, Smith DE, Douglas RM. Immunization with a polyvalent pneumococcal vaccine. Arch Dis Childh 1781:56:354-7.
- 2. Chen LC, Rahman M, Sarder AM. Epidemiology and causes of death among children in a rural area of Bangladesh.

 Internat J Epid 1980:9:25-33.
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- 14. Bell LM, Alpert G, Campos JM, Flotkin SA. Routine quantitative blood cultures in children with <u>Haemophilus</u>

 influenzae or <u>Streptococcus pneumoniae</u> bacteremia.

 1985;76:901-904.

ABSTRACT SUMMARY FOR ETHICAL REVIEW COMMITTEE

- 1. Patients with pneumococcal bacteremia during the months of April to October 1987 will be selected. From previous work at ICDDR,B we know that the median age of these patients is 1 year and that 18% are less than 6 months of age.
- 2. None are apparent.
- 3. There is no potential risk associated with the study
- 4. All records will be kept strictly confidential and records with personal identifiers will be destroyed when the analysis is complete.
- 5. Informed consent will be obtained from a guardian.
- 6. An interview will take place with the guardian of the patient using a questionnaire similar to the one attached to the protocol. We estimate that this will take 15 minutes, or an average of 30 seconds per question. The interview will take place in the hospital unless the patients (cases or controls) have already been discharged. In this situation, an interview will be conducted at their home.
- 7. The patients may benefit from the sjtudy because osf the recognition of phumococcal or other bacteremia that may not otherwise have been detected. The general benefit to Bangladesh society is a better understanding of a health care problem with the hope that this could lead to an intervention to decrease death in infants and young children.

8. A retrospective record review will be done of patients with S.pneumoniae bacteremia during the years 1985 and 1986. Clinical information will be obtained from the hospital charts of cases and controls induced in the case-control study. Approximately 80% of patients admitted to the hospital have a blood culture done at present. During the prospective study, this may increase to include almost all patients admitted.

CURRICULA VITAE

	PRINCIPAL/CO-INVESTIGATOR	SYED MOHD. AKRAMUZZAMAN	
•	Surname/Family Name:	Syed Mohd. Akramuzzaman	
	: First name/other names	Akram	
·	Date of birth:	14 August 1955	
	Place of Birth:	Bangladesh	
	Nationality:	Bangladeshi	
 3.	Degrees		
	<u>Degree</u> <u>Year</u>	Institution	Desciplines
	M.B.B.S. 1982	Rajshahi Medical College	Medicine
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5.	Present post (Title, Insti-	tution, Dates)	
	Title:	Medical Officer	
	Institution:	Dhaka Hospital, ICDDR,B	
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	Dates:	December 8, 1985 till to d	a+e

	Title: a. R	esident Medical Officer
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	Institution: Dh	naka Shishu Hospital
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ICDDR.B BUDGET PROPOSAL (In US \$)

PARTICULARS "A STUDY OF PATIENTS WITH STREPTOCOCCUS PHNEUMONAIE BACTEREMIA SEEN AT ICDDR, B DHAKA HOSPITAL" P. I's name: Dr. Syed Md. Akramuzzaman Starting date: ... April, 1987..... Protocol no:...... Completion date: September, 1987 ... Budget code:.... :Column B : Total EXPENSE CATEGORY 1st year : 2nd year: 3rd year : Project 161h April : Jan. - Dec. : Jan. - Dec. : Cost to 16/4 october A/C Description Refer 2868 No. Page 3100 Local Salaries 3200 Intl. Salaries 3300 Consultants 14 3500 Travel Local 15 3600 Travel Intl. 16 100 3700 Supplies & Mat. 18 3800 Other Costs 19 4800 Inter Deptl. Ser.20 3568 Total Direct cost 0000 Indirect cost = 31% of 1106 total direct cost : 4674 TOTAL OPERATING COST 0300 Capital expenditure 4674 TOTAL PROJECT COST

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Reviewed by Budget & Finance

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3704	Stationery and office supplies (battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	100
3705:	Chemicals and media (acid, reagent, dextrose, sodium, bactoagar etc.)	
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Contd. to page 18

Budget86.17 Aziz-13.

SUPPLIES AND MATERIALS-1ST/2ND/3RD_YEAR

(Contd.	from Page No. 17)		<u>.</u>	ہ سے میں میں بیٹر بیٹر میں میں میں میں ہے۔
(A/C code	Item description	:	\$	Amount
!	Page total from page 17 (balance c/d)	;	···	100
3711:	Tools and spares (automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	;		
3712	Non-stock supplies (materials not normally kept in stock and purchased only against specific requisitions)	; ;		
[Sub-Tota]	;		
; 3713; ; 3713; ;	Freight and other charges add 30% for import	;		
	TOTAL	=;= = = =		100
	-	;	PA A/	REES WITH GE 1 C 3.700 LUMN D
				-

Note For rates please contact Supply Ext.260 (add 10% to rates for inflation)

Budg:t86.18 Aziz:13.

OTHER COST-1ST/2ND/3RD_YEAR

A/C : code:	Accounts Description	\$ Amount
3800:	Repairs and maintenance (maintenance and repairs of vehicles, equipments, furniture and building)	
3900;	Rent, communication and utilities (postage, telephone, telegram, electricity etc.)	
4100;	Bank charges	;·
4200:	Legal and professional expenses (professional membership fee, legal fee, audit fee etc.)	 - -
4300;	Printing and publication (printing of forms, books, journals, reprints etc.)	200
4400:	Espitality & denstion - (guest house accommodation, donations, hospital food, lunch, refreshment etc.)	
4500:	Service charges (porter, labour, washing, laundry and other misc. exp.)	
4600;	Staff development and training (training course fee, training materials, stipend, scholarship, subsistance paid to the staff)	1
	TOTAL	200
		: AGREES WITH : PAGE 1 : A/C No.3800 : COLUMN D

**INTERDEPARTMENTAL_SERVICES-1ST/2ND/3RD_YBAR

A/C : code :	Service Area	\$ Amount				
4801 :	Computer	300				
4802 :	Transport Dhaka	50				
4803 ;	Transport Matlab	:				
4804 :	Water transport-Matlab	; -				
4805 ;	Transport Teknaf	1				
4806	Xerox	; 50				
4807 :	Pathology	!				
4808 :	Microbiology tests	;				
4809 ;	Biochemistry	;				
4810 :	Х-Вау	;				
4811	I.V. Fluid	1				
4812	Media	;				
4813	Patient hospitalisation study	1				
4814 :	Animal research	1				
4815	Medical illustration	<u> </u>				
4817	Telex	;				
4818	Out patient care	;				
4819	Maintenance charges	;				
	Vehicle maintenance charges	•				
•	Library service charges	!				
: : 4830 :	Transport subsidy	!				
}	TOTAL	; * 400				
** Pleas	e contact Cost Office on Ext. 281.	*AGREES WITH PAGE 1 A/C 4800				

CONSENT FORM

(Pneumococcal Bacteremia Study - Case)

(Statement read and clearly explained to the patients family when consent is obtained).

The ICDDR, B is carrying out research on infections caused by a bacterium called <u>Streptococcus pneumoniae</u>. This bacterium can infect the blood and cause pneumoniae. (Patients name) has had this bacterium isolated from his/her blood. We would like to ask you some questions about your child's health and things that he/she may have been exposed to around your home. We would like you to participate in the study for the benefit of society.

If you are willing to participate in the study, you will be interviewed for 15-20 minutes. This will not affect the length of time that your child is in the hospital.

You do not have to participate in this study if you do not want to. This decision will not affect the way your child will be treated in this hospital. Moreover, you may withdraw from this study at any time without penalty.

The records of your responses to our questions will be kept confidential:

If you wish to allow your child's participation in the study voluntarily, then please sign your name or give your left thumb impression below.

					_					
Si	gnat	ur	e	of:	Inve	35	t. i	g	at	o٣

Signature/Left thumb impression of the patient or a responsible family member.

Date: -----

CONSENT FORM

(Pneumococcal Bacteremia Study - Control)

(Statement read and clearly explained to the patients family when consent is obtained).

The ICDDR,B is carrying out research on infections caused by a bacterium called <u>Steptococcus pneumoniae</u>. This bacterium can infect the blood and cause pneumonia. A patient in our hospital has an infection caused by this bactreium. Your son/daughter was seen at our hospital just after this patient and is of the same age. We would like to measure your child's height, weight and arm circumference; and ask you some questions about his/her health and things that he/she may have been exposed to around your home. We would like you toparticipate in this study for the benefit of society.

If you are willing to participate in the study you will be interviewed for 15-20 minute. This will not afffct the length of time that your son/daughter is in the hospital.

You do not have to participate in this study if you do not want to. Thedecision will not affect the way your child will be treated at the hospital. Moreover, you may withdraw from the study at any time without penalty.

The record of your responses to our questions will be kept confidential. =

If you wish to participate in the study voluntarily, please sign your name or give your left thamb impression below.

Bingature	of	Investigator

Signature/left thumb impression of the patient or a responsible family member.

Date: -----

358416 2/2 राभारे (रागव- रामार (त्यारीय अर्ज्यावरा र्ववाह अर् () व्यासार २१४१६ व्या अर्थकाय व्याम व्यास १) करामुक्तारिक देवरामण भ्राममा (यम् (क्री) व्येरकद्या ४० विद्याति नामप जीवात हार्येच (वाभ अल्क्स्स निर्ण अरक्षमा संहर्ष १ एड थर्मार व्हा वाक एका सहस्या संहरण सारक 3 मिर्ट्रामिशन (काम रामाण अत्ता । ((कामरेस नाम) पर वाक . एर थीनार्य स्टा- अरहरह । लाजान लामचार क्रिकेद स्थान्ति किये अम् एक सामान कर १ तर १८०१ हर १८०० कर का अपन र्भी राक्रान राज्यायके अरवन्यक राज्य । ७४७२ में अहर अरक्य अर ७५२० १०० है। वर्ष ७७२० वर्ष २६-२० जित्र के व्यापा अभगाय व्यापक्षात्र व्याप २८४ १५२७ क्षाम् कर्ष के कर्याता करार क्षाम् करार करा करा कर्षा कर्षा करा कर्षा करा कर्षा करा करा करा करा करा करा करा करा N 3 सम्बर्ग । एड् रिस्प्रिय लगमगाव क्रिक्ट हिर्मिर स्थार (१९४८) (अ) में प्राय (अन्याय - यह १-०४ के के के निकार का विश्व का अवार १८४१ हेर नाम्या कार्य हिर कर मायर कर मायर कार्य कार्य (अध्यारिक रहक निर्देश मार्थिक (अअभित देन कार्येत्य त्राधात प्रथित कर अवकार कर अवकार कार्य कर अवकार कार्य का (NEAR 3724 परगरा 317 , (127 में 371 वर्ग 348/16 मेरक 15-71 (क्रामेंक जलका अधिकारवंक सक्षान MARKAL ANDRELL मार्थिन दे असरमाय अम्बर्स म्यूटन UN & \$1. 112 2313, CNO 357 1

3/3/176 40 (रिमिट्टामा कार्याचा कार्याका कार्याचा नार्यामा - व्यक्तिमा) माने (यमान स्थाप कामीय अध्यानपत विषय भाष (भागाता) 112 हर अर्धियार यात दीनुषण (६५७ ४८५८६ ।) ल्यान्त्रात्त्र द्वायायाय प्रत्यात्ता नामका । व्याप्तात्ता निवर्षात्त्र निवर्षात्त्र उत्य- भीषात राष्ट्रिण (काम अंदक्तमा निराय- भरत्यमा क्रिया । वर्ष रवार प्राहर प्राहर हो हेरास वर्षा प्राहर व रिस्का स्वाप यार अमर्थ । (अस्मारमण वक्षाराम्य क्षियंत (येर भी- वर्ष कीवास 101- दार कारीक 21278- 1 (राभगाय- भूज / यम्मारल (रामारक- यह अम्पारल (CANASA - क्रिक अंदेश (१३१८ अंदिर के क्रिक क्रिक क्रिक अंदर) राम्या- व्यास्तार्ग विस्तर्ग १८६०८, राज्य, उस्त व्यास्त्रं मार्थि त्र इरगरत (१२ स्प्यूरम, निष्ठे भेभे हिन्छस्य रहण । (१७४०) ६४५ 222 219 024 25he MON JULAN 2110 2110 2110 06-50 छिएस्ट राज्य काम्मार नेपार हार प्राप्त प्रका राजा राजा १८१७ MAY के प्राणित - केरो हैतवाल - स्थारक राज्य = क्षेत्रक केरो निर्माण 24677 24370 WY / ولمد مده که کدار کوهم . بدرد جدهد من کوری کوری مده کو کرددرم अगरण्य । एड व्यक्ति क्ष्मिन क्षिण विषय (क्षात (क्षात विषय) । प्रकार त्राया का निर्मात का निरम्पात है। त्राया के कार्य निरम्पात का नामकार । कार्या का नामकार कि नामकार कि LERICALION - REDIES - RELICION - RILLE - REDIE - RELICION 1 222 - LAN - LYRE ारतमस्य १८ दुव - कार्यकार्य निर्मास्यात न्याकार्य) धुरक् <u>म्या</u>स्यात کدمهرس حدید وراهم مورس در کرد کور کرد کرد کرد کرد کرد کرد درم भारत स्थाप्त क्या अग्राहरू न्या निवास निवास निवास निवास NIBALKA - PAIROLN एकार्य क्राया अध्याक्ष क्रम ्राह्यहराः प्रात प्रवासी के प्रात्त निर्देश के प्रवास के प्रवास प्रात्तिक प्रात्ति के प्रवास के प्रवास के प्रवास के प्रवास

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QUESTIONNAIRE

inter	rviewer	Date o	of intervi	ew//	_/
	Pneumococcal Ba (Patient's ide				
i	Name of patient				
2.	Adress		and the same of th		*
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J.	Hospital number	مناه مناه مناه و مناه و مناه و مناه المناه المناه و مناه المناه و مناه المناه و مناه و مناه و مناه و مناه و مناه			
4.	3	//			
5.	교육자				
6.	Date of admission	_//	/		
MEDI	ICAL HISTORY			•	
		. Aeè	No .	UNK	-
7.	Hospitalized for ALRI during past year?	p			
	if yes, when				
8.	Hospitalized for diarrhoea				
	during past year?				
	if yes, when				
ዎ.	Past history measles, chicken pox.	, which states on the			
	if yes, when	ا کالی جانب سند شخم مسند یہیں	,,, <u></u>		
10.	Immunizations:	Yes	No	UNK	
	BCG DPT 1st dose DPT 2nd dose DPT 3rd dose	ages man mile		unit libra dian unit milita unit milita unit milita	
	Measles		Link fruit fruit		

11.	Is child cureently breast feeding?		
	If yes, how may times a day		times
	If no, age when breast feeding stopped		age in . months.
12.	Is there any case of runningnose or chr in family or community.	onic coush	
FAMI	_Y AND HOME	•	
13.	Number of children living together in house <5 years of age	<u></u>	was done and done cold
14.	Cooking fuel (More than one answer pos	sible)	,
	Wood Kerosene Electricity Gas Other (specify)		
15.	Cooking location (more than one answer	possible)	
	Sleeping area Outside Kitchen (Separate Room) Other (Specify)	ual dan erre sier alle erle (18 %ee hie sie he	, , while damp 1980 1980 SPC
16.	Is there any smoker in family?		
	If yes, number		
17.	Light source (more than one answer pos	sible)	
	Kerosene Wood Electricity Other (specify)		
18.	Number of rooms in house		,
19.	Number of people who usually sleep in	same	
	room as patient		Name and the same of
20.	Number of people who usually sleep in bed as nationt	same	

21.	Construction of house walls			
	Jute Bamboo Tin Wood Concrete Brick Other (specify)			·
22.	Type of roof on house			•
	Straw Tin Wood Concrete Other (specify)			
23.	Type of floor .			
	Clay Brick Cemented Wood Bamboos Other (specify)		• 	alan ann ain ain ann
24.	Does family own house?	Yes	No	UNK .
25.	Father's education			
-appenin gas manyagan ^{(**}), [†] ha ^{**} bana	Illiterate Frimary Secondary H. secondary University		*	
26.	Mothers education			
	Illiterate Primary Secondary H.secondary University		١	
27.	Mother's age		years	

28. No. of children <5 years

<i>z.</i> 7 •		
	Service Business ' Labor Other	-
30.	Family income per month in Ta	ka
	Up to 500 501 - 1000 1001 - 2000 2001 - 4000	

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ID of child:
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Name of child:

Date:

Time of arrival:

Time of departure:

Name of observer:

Mother present:

$$Yes = 1$$

$$NO = 2$$

If mother absent, who is taking care of child?

Older sister

Father

= 3Grandmother

= 4 (describe) Other

Not applicable= 8

How many times did the child eat(snacks included)?

Did the caretaker prepare anything with $d\mathbf{p}$ and vegetables?

Yes = 1

= 2No

Not applicable = 8

Hand washing before preparing food: Yes = 1

No = 2 Not applicable = 8

5 3

Hand washing before giving food to the child: Yes = 1 No = 2 Not applicable = 8

3 $\overline{2}$

older than 6 months fed with solid food in addition to the Younger sibling ' breastmilk

 \cdot Yes = 1

= 2 Νo

Not applicable = 8

