

# The Base-line Data on Child Mortality and Morbidity in Turk Colony, Baldia Town

Pages with reference to book, From 14 To 19

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The UNICEF in collaboration with the University of Karachi and Jaycees sponsored the project for the construction of soakpit latrines and the dissemination of basic health education materials for the improvement of sanitary conditions in slum areas of Karachi. Turk Colony in Baldia Town is one of the slum areas where the soakpit project has been established with the primary objective of improving the sanitary condition, particularly the disposal of human waste which contribute largely to the problems of health and disease. It is assumed that long-life soakpit latrines would be a relevant solution to reduce the problems of child mortality and morbidity. The soakpit project has been established which envisages to construct soakpit latrines in Baldia Town starting with Turk Colony and eventually to cover the entire area.

The problem of child mortality and morbidity is considerably grave and threatens all the katchi abadis in Karachi. The gravity of the problem may well be understood by the estimates calculated that out of every 9 babies born in the slum areas of Karachi, more than 1 dies before reaching one year of age, while 1 in 4 do not reach the age of 5, and those who survive suffer from frequent illnesses and ill-health due to such problems as gastro-enteritis, amoebiasis, worm infestation and the like, which are pre-cursors of malnutrition and heightened susceptibility of other diseases and the severity of them such as measles. Two common root causes of these deaths and illnesses are unsanitary methods of human waste disposal and a low level of health consciousness. Whilst this situation prevails throughout Pakistan, the slum areas of Karachi are particularly affected due to high population density and a shortage of health and other social facilities. It is estimated that about 2,000,000 people live in the slum areas of Karachi. Baldia with a population of 150,000 is one of the largest slum concentrations. Though Soakpit latrines are not the end in itself but a means to tackle some of the above mentioned priority problems of child mortality and morbidity, the effect of the venture has been quite encouraging and the contrast between the old and new latrines has accentuated the considerable improvement in sanitary conditions in the houses since the construction of the soakpit latrines. The project is well known throughout Baldia and there is a strong demand for soakpits from local residents. Based on the progress and the background of the local area of Turk Colony, it was decided to conduct a census survey of the area to know the prevalence of child mortality and morbidity. This survey is the first of its kind and could be carried out in other areas of Baldia where soakpit latrines will eventually be constructed under the Baldia Soakpit Project.

## **THE OBJECTIVES:**

This survey has been conducted with the following objectives:

- (a) To know the rate and census of child mortality and morbidity in the area.
- (b) To know the rate of prevalence of common diseases, particularly water-borne diseases and methods of their treatment.
- (c) To know the pattern of child deliveries prevalent in the community.
- (d) To know the exact number of children between the ages 0-10 in each family.

## **METHODOLOGY:**

In order to conduct this survey a methodology was developed. The methodology designed for this survey includes the selection of the sample, identification and training of the investigators, preparing a questionnaire, pre-testing, collection and tabulation of the data and their interpretation; and drawing up of conclusions and formulating recommendations for further studies.

**(a) Selection of Sample:**

The Turk Colony area has been covered in this survey. The entire Colony consists of about 546 households (families) living in about 470 houses, most of the houses containing more than one family. Since this was a primary survey and comprehensive information was needed no sample was drawn but the entire households were included in the survey. It is, therefore, a census survey and covers the entire households inhabited in the colony.

**(b) Identification and training of the investigators:**

It was considered important to have qualified investigators for this survey, who could collect data from the respondents who were women and un-educated with rigid conventional and traditional attitudes and cultural pattern. Most of the women had reservations and constraints even to talk with women about child birth, pregnancies and diseases. Quite a few even did not know theirs and their children's ages or their husband's incomes, and some did not want to confide to "outsiders" regarding such intimate matters. Therefore, we were careful in selecting suitable girls to collect the data. We hired 10 advance female students of social work department who had some knowledge of research and survey methods. These girls were given about a week's training and were thoroughly oriented with the purpose of the survey, peculiar characteristics of the respondents and the community. After the training these investigators were asked to pre-test the questionnaire and were further closely supervised in their data collection activities. They were helped and guided in their work and the community organizer was at hand to help them deal with any problem that came up during the process of data collection.

**(c) Preparation of questionnaire:**

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The Questionnaire

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Date:.....

Name of the Area:.....  
Name of the Interviewer:.....  
Respondant:.....  
Plot No:.....

Q.1 How many babies were born within last 12 months?

- (a) Dai at home
- (b) Nurses in Hospital
- (c) Doctor in Hospital
- (d) Elderly lady within the mohalla
- (e) Any other

Q.3 Did any of the baby die?

- (a) Yes
- (b) No

Q.4 If yes, what did they die of?

- (a) during birth
- (b) still born
- (c) diarrhoea
- (d) dysentery
- (e) high fever
- (f) any other

Q.5 How many children between the age of 0-10 years live in the family?

Q.6 What illnesses did they suffer during last 12 months?

- (a) Malaria
- (b) Diptheria
- (c) Tetanus
- (d) Cholera
- (e) Smallpox
- (f) Diarrhoea
- (g) Dysentery
- (h) Stomach ailment
- (i) Influenza
- (j) Jaundice
- (k) Respiratory ailment
- (l) Whooping cough
- (m) High fever
- (n) T.B.
- (o) Heart diseases
- (p) Mental Illnesses
- (q) Any other (surgical, skin, disease of kidney, organic, etc.)

Q.7 How were their illnesses treated?

- (a) By doctor (private clinic)
  - (b) By Hakim and Homeopath
  - (c) In the Hospital
  - (d) By spiritual Pirs
  - (e) Any other (home made remedies both religious and traditional, etc.)
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The questionnaire was prepared according to the requirements of the work plan of Baldia Soakpit Project to get the statistics of child mortality and morbidity. The questionnaire was pre-tested and necessary alterations and modifications were made as needed according to the local social conditions.

**(d) Collection of the data:**

The data collection was started after the questionnaires were finalized. Each investigator was allotted a lane and thus they spread out in each lane and collected the data starting from house-to-house. At the end of the day's work they deposited the filled out questionnaires in the office where the data was further processed and tabulated.

**(e) Tabulation of the data:**

The data thus collected in the project office was first checked and its validity was ensured. After the checking, the data was transferred on a tally sheet and then relevant tables were prepared.

**(f) Interpretation of the data:**

The data was then interpreted and conclusions were drawn accordingly. On the basis of the conclusions thus drawn recommendations have been formulated for further study and survey in other areas.

**Interpretation of the Data**

The data has been arranged in seven different tables as appended herewith.

This data relates to 526 families whereas there were a total of 546 families living in that area. Twenty families could not be contacted as the women of these houses worked outside the mohalla and were employed as 24 hour housekeepers, but the children of these women stayed back at home. Thus the total data in this survey relates to 526 families only.

# Table I

How Many Babies were Born Within Last 12 Months?

<i>No. of Respondants</i>	<i>No. of children born within last 12 months</i>
526	186

Table I relates to the number of babies born within a period of 12 months. It shows that 186 babies were born within last 12 months in 526 families, which means that the rate of birth is 35.36%. This rate of birth is considerably high and indicates that the number of children in the individual families is on the high side.

It is also evident from this table that generally the families have large number of children and the frequency of child birth is high.

Table II  
Who Delivered The Baby?

<i>Who</i>	<i>No. of babies</i>	<i>%</i>
Dais at home	157	84.41
Nurses in Hospital	3	1.61
Doctor in Hospital	25	13.44
Elderly lady within the mohalla	1	0.54
	186	100.00

Table II indicates that mostly the babies in this locality are born at home and through dais, the indigenous midwives, who are generally untrained. The table indicates that 84.41% of the babies were born at home and through untrained dais while about 15% babies were born in hospitals or maternity homes.

The practices of babies being delivered at home, however, could be due to their traditional and cultural attitude in some cases, but majority of the women confided, during observational visits by the Community Organizer on different occasions that they preferred deliveries at home by dais due to the lion-cooperative and sometimes rude behaviour of the hospital staff. Moreover, they also prefer it because it is convenient and saves them several trips to hospitals or MCI-I centres and thus they save money and time which they had to waste in standing in the queue for their turn. It also gives them a sense of security, as the entire family, relatives and neighbours are around for any eventuality. They also get comfort and care of home, and do not have to worry about the children left at home. Thus due to the above reasons even those women who get registered at the hospitals or MCH centres, do not go there at the time of the delivery and prefer to get the delivery done at home through dais who are easily accessible. Deliveries at home, however, points out that hygienic ways and cleanliness are less important for these women than their comfort and that is why they prefer to under go the risk of being delivered at home.

# Table III

## Did Any of The Babies Die?

<i>Yes</i>	<i>No</i>	<i>Total</i>
23	163	186
(12.37%)	(87.63%)	(100%)

Table III refers to the child mortality in the families. Out of 186 children born during the last 12 months, 23 died which means that 12.37% of all the children born in one year (lived before reaching the age of 10 years). This rate of mortality is quite high and needs attention. It may be recalled that the estimated figure of mortality in slums of Pakistan is about 11.11%. The high rate of mortality, however, may be attributed to several causes but bad sanitation and unhygienic ways of living seem to be the outstanding causes as these conditions exist in most of the slums just as they do in this area of the Baklia Town. Before the construction of soakpit latrines, open latrines and littering human excreta was a common sight in the area.

# Table IV

## What did The Babies Die of?

<i>Reasons</i>	<i>No. of babies died</i>	<i>%</i>
During birth	6	26.09
Still-born	7	30.41
Diarrhoea	4	17.40
Dysentery	3	13.05
High fever	3	13.05
<b>Total</b>	<b>23</b>	<b>100.00</b>

Table IV indicates the causes of death of the children. It shows that 26.09% of the children died during birth while 30.41% were still-born, whereas 17.40% died of diarrhoea, 13.05% each died of dysentery and high fever. This indicates that lack of facilities, awareness for pre-natal and post-natal care and insanitary and un-hygienic ways of living are the major causes of high rate of mortality.

Table V

How Many Children between the Age of 0-10 That Live in That Family?

<i>No. of families</i>	<i>No. of children in the age group of 0-10, in the family</i>	<i>Total No. of children</i>
59	1	59
133	2	266
110	3	330
60	4	240
14	5	70
13	6	78
12	7	84
4	8	32
1	7	7
78*		
42*		
20***		
546	43	1166

Note :-

- \* 78 respondents have children above the age of 0-10 years.
- \*\* 42 either did not conceive at all or they died or the respondent is expecting the birth of first baby or she is married during last year.
- \*\*\* 20 respondents are working mothers who work and live outside the community, and were not available.

Table V refers to the number of children between the age 0-10 in the families of the respondents. There were 526 respondents out of which 78 had children above the age of 10, while 42 had either no children or were newly married and were expecting their first baby. Thus only 406 respondents had children between the ages 0-10. The total number of children in this age group was 1166. This means

on the average per family had 2.87 children of 0-10 years of age. This figure, however, does not refer to the children in the families who are above 10 years of age and as such the average of the children per family will go up if the children of all ages are included.

## Table VI

What Illnesses did They Suffer During Last  
12 Months?

<i>Illnesses</i>	<i>No. of children</i>
Malaria	210
Diphtheria	16
Tetanus	2
Cholera	0
Smallpox	0
Diarrhoea	117
Dysentry	113
Stomach ailment	141
Influenza	309
Jaundice	71
Respiratory ailment	78
Whooping cough	93
High fever	189
T.B.	11
Heart diseases	2
Mental illnesses	4
Any other (surgical, skin, diseases of kidney, organic etc.)	96
Total	1452

Table VI indicates the various types of illnesses the children between 0-10 years of ages suffered from during the last 12 months. It shows that highest number of children (309) suffered from Influenza, 210 suffered from Malaria and 189 suffered from high fever. Next comes stomach troubles (141), Diarrhoea (117) and dysentery (113). This data clearly indicates that bad sanitation, unhygienic conditions and bad storage of food stuffs and water are the major causes of illnesses. Water-related diseases are generally the most common diseases in this area like that of all other slum areas.

**Table II**  
**Who Delivered The Baby?**

<i>Who</i>	<i>No. of babies</i>	<i>%</i>
Dais at home	157	84.41
Nurses in Hospital	3	1.61
Doctor in Hospital	25	13.44
Elderly lady within the mohalla	1	0.54
	186	100.00

Table VII refers to the types of treatment given to the children who suffered from various illnesses as indicated in the previous table. It indicates that most of the children (831) were treated by doctors in their private clinics whereas (253) were treated by seipritual leaders, 159 were treated by Hakims & Homeopaths, and 149 resorted to home-made remedies, while only 84 were treated in the hospitals. This data indicates the attitude of the people in this community which is that they still believe in spiritual healers and go to doctors only when the illness become serious. Moreover, the doctors to whom they have access are generally the quacks because in slum areas the quacks have their clinics and practice like qualified doctors. However, a few qualified MBBS doctors also practice in such areas, though in Turk Colony the majority is of quacks.

**Conclusion**

This survey was conducted in Turk Colony of Baldia Town to collect base-line data regarding child mortality and morbidity. The survey was a census survey and each household of the area was covered. There arc 546 households living in about 470 dwelling units. Out of 546 respondants, 20 were not available as they work outside the community and live there. They come to their own houses fortnightly or once a month, while they do have children who are left at house and looked after by some relatives or neighbours or husbands. Thus the data relates to 526 respondants only who answered the questionnaires.

The data presented in this repOrt indicates that during the last 12 months from the date of survey

35.36% (186) children were born. This birth rate is considerably high and indicates that the families have generally large number of children; though the average of children between the ages of 0-10 years comes to about 3 children per family. This shows that the frequency of child birth is quite high in this area.

The data indicates that the children are generally delivered at home with the help of dais (indigenous midwives). The women adhere to their traditional and conventional ways and thus risking their own lives and that of their babies being born through untrained dais. The awareness towards health is there but due to uncooperative behaviour of the hospital staff they do not go to hospitals for delivery though they sometimes do get themselves registered.

The child mortality is considerably high. It is about 12.37% and it means that 1.24 in 10 do not reach the age of 10. This rate of mortality is considerably high. This high rate of mortality may well be attributed to unhygienic and unscientific birth practices though there are several other causes like intensive physical labour, lack of rest during pregnancy and the like. A good percentage (26.09%) died during birth while (30.41%) were still-born. It also indicates that lack of pre-natal and post-natal care is responsible to a great extent for high rate of mortality in this area like other slum areas. The next high total of mortality is taken by diseases like malaria, diarrhoea, flu and the like, which indicate that bad sanitation, improper and unhygienic storage of food stuffs and water is mainly responsible for high mortality and morbidity. The children have frequent illnesses and most of the illnesses are waterborne illnesses. Malnutrition is another cause of low resistance and frequent illnesses among the children. The data further indicates that the morbidity is considerably high, and of all the children between 0-10 years (1166), 1452 children suffered from one or many illnesses at one or the other time. The prevalence of illness is quite high and points out to the fact that bad sanitation and un-hygienic ways of living prevalent among the community should be dealt with on priority basis.

### **Recommendations**

This survey provides base-line data regarding the mortality and morbidity in Turk Colony which is a slum area within Baldia Colony. The conditions that prevail in this area are pretty much the same as in other slum areas. This survey has provided relevant data for future planning of developmental programmes. In this regard the following recommendations are being made for future implementation:-

(a) Community based facilities for improved delivery services within the area should be provided.

Arrangement for the training of dais and midwives should be provided within the community.

(b) Facilities for proper health education and prenatal care through LHVs and other media should be provided.

(c) On the pattern of this survey base-line data should be collected from other slum areas (Mohallas) of Baldia where soakpits would be eventually constructed.

(d) After the construction of soakpits a follow-up survey should be conducted to know the impact of soakpits and to evaluate the change in the attitude of the people of the community.

(e) People in slums need awareness and motivation. Therefore, due stress should be given to social awareness and motivation of the people for further development programmes including the construction of soakpits.

(f) Involvement of people is essential for social change in slum communities. It is, therefore, essential to involve the people at grass-root level, identify local leadership and train them for social change.

(g) In order to make the change and developmental process sustained and dynamic it is essential to identify, train and develop local social institutions and involve them into the developmental activities in the area, so the institution building activities should be taken up and developed in the area.