A STUDY ON HEALTH STATUS OF CHILDREN UNDER FIVE YEARS OF AGE IN A RURAL VILLAGE OF EASTERN PART OF NEPAL

Dewa Adhikari

Abstract

Introduction: Every needy child should receive the best medical and surgical attention. In 1940, the White house Conference proposed adequate health services including medical and dental examination, immunization and early detection and treatment of diseases, vision and hearing tests, prevention and control of disease, health records and health services facilities.

Objectives: To assess the health status of under five children. To know the treatment preference of the parents towards their sick children. To initiate control measures early, by allocating the health resources more efficiently and providing health awareness activities.

Materials and Methods: Descriptive cross-sectional study was conducted. The entire 1-5 years age child (40 children) residing in Dharan Municipality ward. No-17 at Phoklen Tapu was included. Simple random sampling technique (lottery method) was used to select the village and Census survey technique was followed to find out the 1-5 years children. The survey was conducted by investigator herself and self develop tools were used to health status of the child.

Results: Most of the morbid conditions founded in the study were related to skin diseases (ring worm, boils/wound, cuts, eczema/ redness), ear infection, enlarged lymph node, Pneumonia, Diarrhoea/ vomiting, abdominal enlargement and malnutrition with different grade.

Conclusion: Majority of the parent were not having health education regarding child care. They treat their child with home remedies, by faith healer then after third time they seek sick child with health personnel.

Key words: Children, Children’s’ health status, Nepal

Introduction

According to the constitution of World Health organization (1948), healthy development of the child is of basic importance, the ability to live harmoniously in a changing total environment is essential to such development. The convention on the rights of the child adapted by the general assembly of the United Nation in 1989 is a set of international standards and measures intended to protect and promote the well being of the children in society.

Under the rights of the three vital components are recognized: health, food and care. It was decided in 1997 that the main goal of WHO and governments should be the health for all (HFA) by 2000. The essential principle of HFA is the concept of equity in the health. I.E. all people should have an opportunity to enjoy good health. so for the
good health, ongoing investments are needed. Only then, a child can grow and develop into a useful competent asset, participating as an adult member to the community as well as nation. Their healthy life depends upon their parents, community people and health care system.

At the white house conference (WHC) on the care of the Department of children, it was proposed that “every needy child should receive the best medical and surgical attention. In 1940, the WHC proposed adequate health services including thorough medical and dental examination, immunization and early detection and treatment of diseases, vision and hearing tests, prevention and control of disease, health records and health services facilities. Nepal is facing the vicious cycle of PPE spiral i.e. Poverty, population explosion, and environmental degradation. However various types of governmental and nongovernmental health programmes have been launched from time to time but they are still need improvement. the concrete efforts to care to the under 5 through agencies still remains to be provided regularly. The recent NDHS report showed that 13 % (41.94 Million) are underfive of the total population (23.2 million, 2001). This is one of the highest ratios of child population in the world.

Therefore considering the amount magnitude of problems this study was carried out with objectives to assess the health status of childrens’ below five years of age residing in ward 17 of Dharan municipality. This study also aimed to find out the possible anthropometric measurements of subjects and also to detect the early warning signal of the disease and other possible common morbidities among subjects and to know the treatment preference of their parents.

Materials and Methods

A cross sectional descriptive study, which catered all entire population of children below age of 5 years of a selected ward of Dharan municipality was carried out within a period of one year beginning from 15 January 2011. A simple random sampling technique (lottery method) was used to select the study area and Census survey technique was followed to find out the children below age 5 years.

A specifically designed questionnaire was used to record all necessary information. Consent from the parent was obtained. The available information kept confidential and double entered in to a personal computer and analysed using SPSS 11.5 version.

Results

Table1: Distribution of Children by Gender

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year</td>
<td>1</td>
<td>1</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>2 Years</td>
<td>1</td>
<td>1</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>3 Years</td>
<td>7</td>
<td>5</td>
<td>12 (30%)</td>
</tr>
<tr>
<td>4 Years</td>
<td>6</td>
<td>10</td>
<td>16 (48%)</td>
</tr>
<tr>
<td>5 Years</td>
<td>3</td>
<td>5</td>
<td>8 (24%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>22</strong></td>
<td><strong>40(100%)</strong></td>
</tr>
</tbody>
</table>

Table no 1: shows that both genders were distributed equally in among the sample population there were 22 girls and 18 boys.
Fig. 1 shows that majority of the children were from Disadvantaged Janajati 70%.

**Table 2: Personal Hygiene of the Children**

<table>
<thead>
<tr>
<th>Hygiene</th>
<th>No=40</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin: clean</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Dirty</td>
<td>34</td>
<td>85%</td>
</tr>
<tr>
<td>Cloths: clean</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>Dirty</td>
<td>30</td>
<td>75%</td>
</tr>
<tr>
<td>Bath: Once a week</td>
<td>34</td>
<td>85%</td>
</tr>
<tr>
<td>Daily</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>When get dirty</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Hair: clean</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Not clean</td>
<td>19</td>
<td>47.5%</td>
</tr>
<tr>
<td>Pediculosis</td>
<td>9</td>
<td>22.5%</td>
</tr>
<tr>
<td>Dandraff</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>Nose: clean</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>Running</td>
<td>25</td>
<td>62.5%</td>
</tr>
<tr>
<td>Blockage/obstruction</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Mouth: Healthy soft</td>
<td>20</td>
<td>50%</td>
</tr>
<tr>
<td>Dirty</td>
<td>14</td>
<td>35%</td>
</tr>
<tr>
<td>Angular stomatitis</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Teeth: healthy/ soft</td>
<td>11</td>
<td>27.5%</td>
</tr>
<tr>
<td>Dental carries</td>
<td>24</td>
<td>60%</td>
</tr>
<tr>
<td>Swollen/ bleed</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Nail: short/ clean</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Long/ dirty</td>
<td>35</td>
<td>87.5%</td>
</tr>
</tbody>
</table>

Table 2, depicted that majority of the children’s personal hygiene were poor.

**Table 3: Health Status of the Children**

(within 6 week)

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ring worm</td>
<td>3</td>
</tr>
<tr>
<td>Boils/ wound</td>
<td>20</td>
</tr>
<tr>
<td>Cuts</td>
<td>5</td>
</tr>
<tr>
<td>Eczema/redness</td>
<td>6</td>
</tr>
<tr>
<td>Ear discharge</td>
<td>10</td>
</tr>
<tr>
<td>Mumps/Enlarged lymph node</td>
<td>2</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>10</td>
</tr>
<tr>
<td>Diarrhea/ vomiting</td>
<td>20</td>
</tr>
<tr>
<td>Abdominal enlargement</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutritional status:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Garde I</td>
<td>12</td>
</tr>
<tr>
<td>Garde II</td>
<td>3</td>
</tr>
<tr>
<td>Garde III</td>
<td>2</td>
</tr>
<tr>
<td>Garde IV</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3, depicted that among 40 children, major number of the children (20) were suffered from skin disease Boils and wound (20) gastrointestinal problems diarrhea/vomiting followed by pneumonia (10) and 18 children’s were suffered from different grade of malnourished compared with Indian Academic Classification(IAP).

**Table 4: Behavioural status (n=40)**

<table>
<thead>
<tr>
<th>Behavioural status:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nail Bitting</td>
<td>6</td>
</tr>
<tr>
<td>Diging nose</td>
<td>4</td>
</tr>
<tr>
<td>Thumb sucking</td>
<td>10</td>
</tr>
<tr>
<td>Bed wetting</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4, states that half of the children’s behavior problem was bed wetting followed by thumb sucking (10).
Conclusion

Household surveys offer an excellent opportunity to screen a large size of underfive population with minimum resources. The present study was undertaken at Dharan-17 (Naya Basti/sukumbasi Tole) where total 34 houses were selected and there were total 40 under 5 child(1-4 years) resides. This study was conducted to find out status of personal hygiene, morbidity patterns, nutritional status, and behavioural patterns.

All of the parents were of low socio-economic background with high percentage of illiteracy. This community was slum area (Sukumbashi Tole), where not facility of water supply and toilet facility at home was only three houses has toilet others use open field. All of the houses were Kachha.

The unhygienic personal hygiene among the children was prevalent to morbid pattern. Most of the morbid conditions founded in the study were related to skin diseases 85 % (ring worm, boils/wound, cuts, eczema/redness), ear infection 25%, enlarged lymphnode 5%, Pneumonia 25%, Diarrhoea/vomiting 50%, abdominal enlargement 12.5% and malnutrition with different Grade 45%.

Among the 40 children depicted behavioural problems as: nail bitting 15%, digging nose 10%, Thumb sucking 25% and bed wetting 50%.

Majority of the parent were not having health education regarding child care. The treat their child with home remedies, by faith healer then after third time they seek sick child with health personnel.

References

2. UNICEF. The right to be child UNICEF India, Background paper 1994; 1-29.

Address of Correspondence: Dewa Adhikari, Nursing Director, Nobel Medical College, Biratnagar
**Annexure I**

**Health examination Tool**

Name of village:

**Parents details**

- a. Father’s
  - 1. Name
  - 2. Education
  - 3. Occupation
- b. Mother’s
  - 1. Name
  - 2. Education
  - 3. Occupation

4. Types of house
5. Water source
6. Types of Toilet

7. **Name of child:**
   - 8. Age:
   - 9. Gender: M/F
   - 10. Ethnic group:

11. **Personal hygiene:**
   - 1. Skin clean/ dirty
   - 2. Hair pediculosis/ dandruff/ clean with combed/ dirty not combed
   - 3. Nails cut & clean/ uncut & unclean
   - 4. Nose clean/ Running nose
   - 5. Clothes clean/ not clean
   - 6. Bath a. daily, b. twice a week c. once a week d. others (specify)

12. **General appearance**
   - I. Built a. normal b. kyphosis c. lordosis d. rickets e. scoliosis f. others

13. **Anthropometric measurements**
   - a. height cm
   - b. weight kg

14. **Lesions at the time of study**
   - a. Eczema b. Ringworm c. Scars d. Impetigo e. pediculosis f. others
   - (specify)

15. **Eyes**
   - I. Redness/ discharge yes/ no
   - II. Any lesion on lids yes/ no
   - III. Any lid abnormality yes/ no
   - IV. Sclera/ conjunctive pallor/ jaundice/ healthy
   - V. Bitot’s spot yes/ no
   - VI. Corneal opacity yes/ no

16. **Ear**
   - I. General condition healthy/ unhealthy
   - II. Discharge yes/ no
   - III. Pain yes/ no
17. Nasopharynx
   I. sore throat/ Tonsillitis
      yes/ no
   II. Nasal obstruction
      yes/ no

18. Mouth
   I. Lips
      a. healthy and soft
      b. angular stomatitis
      c. ulcers
      d. dry
      e. others (specify)
   II. Tongue
      a. healthy and soft
      b. coated white
      c. ulcers
      d. dry
      e. others (specify)
   II. Teeth/ gum
      a. healthy
      b. carries
      c. swollen/ bleed
      e. others (specify)

19. Thyroid
   enlarged/ not enlarged

20. Lymph nodes
   (cervical/ inguinal/ axillary)
      palpable/ not palpable
   Mobile/ not mobile
      painful/ not painful
   Hard/ soft

21. Pulse rate
   / mit
   regular/ irregular

22. Respiratory rate
   / mit

23. Lungs

24. Heart

25. Abdomen
   a. general appearance
      Normal/ abnormal
   b. scars
      yes/ no
   c. Hernia
      yes/ no
   d. pain
      yes/ no
   e. liver/ spleen (enlarged)
      yes/ no
   f. others (specify)

26. Behavior status
   I. Nail bitting
      yes/ no
   II. Thumb sucking
      yes/ no
   V. others (specify)

27. Locomotor system
   a. upper limbs
      normal/ deformed
   b. lower limbs
      normal/ deformed
   c. reflexes
      normal/ deformed
   if any abnormal specify

28. Any communicable diseases ................................................. within 6 months