Students' Corner

A Socioeconomic and Service Audit of Oncology Unit at The National Institute of Child Health, Karachi

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Abstract

Objectives: 1) To analyze the socio-economic status of the oncology patients; 2) to determine the satisfaction of the patients regarding facilities being provided at the Oncology Ward, National Institute of Child Health (NICH), Karachi; 3) determine whether patients deserve support from Child Aid Association or not.

Place and Duration of Study: The Oncology Ward, NICH, during the month of August 2001.

Subjects and Methods: It is a questionnaire based cross-sectional survey.

Results: The average age of the patients was 7 years and they were usually part of a large household, comprising on an average 7 members. Most of the patients were financially quite disadvantaged, with 61% receiving total medical supplies from CAA. Of those who had started treatment at the time the survey was conducted, 99% expressed satisfaction.

Conclusion: As most of the patients belonged to the low socio-economic class, a link can be established between socio-economic status and health and disease. Although, cancer is not necessarily prevalent in a certain social class, those receiving treatment at the Oncology Ward, NICH are genuinely poor and deserve support from donor agencies, like the Child Aid Association (JPMA 53:205;2003).

Introduction

Due to the prevailing economic conditions, more and more non-Governmental Organizations are participating in the health delivery system in the city of Karachi by supplementing the budget deficiencies faced by public sector tertiary care centres in Karachi. To name a few, the Patients Welfare Association at the Dow Medical College, Eye Care Society and Patient Aid Foundation at Jinnah Post-Graduate Medical Centre, Heart Foundation at the National Institute of Cardio-Vascular Diseases, and Child Aid Association (CAA) at the National Institute of Child Health, Karachi. The last organization mentioned has been involved in this type of activity for the past 23 years.

In 1999, the CAA, from its resources, set up a Pediatric Oncology unit at the NICH. This unit comprises of ten beds in-patient, six beds day care facility for chemotherapy, and a state of art laboratory. Since its start the unit is run as a joint venture between the administration of NICH and the CAA. The NICH provides some medical and para-medical staff, diet, part of medication, security, water and electricity. The CAA supplements the deficiency in the staff, medical supplies and the laboratory services, through public donations.

Subjects and Methods

Four hundred patients were registered since the start of the Oncology unit in April 1999 till the time the study was conducted in August 2001. The study sample comprised of 100 attendants of patients, who were questioned according to a set questionnaire by the author. The following parameters were analysed using a standard questionnaire: sociodemographic patient data (age, sex, place of residence, parents' occupation, number of siblings, family supporter and the monthly income), duration of illness before coming to NICH, whether treatment had elsewhere been taken. Patients' satisfaction as regards the treatment received and service provided by the staff. Source of medical supplies purchased by self, from NICH store or CAA store were noted. The data was analyzed using SPSS 8.0 for Windows on Windows 98.

Results

The age of the patients varied from 2.5 months to 15 years. The mean and moda lage was 7 years. Out of these 100 patients, 72 were males and 28 were females. Majority (76%) patients belonged to urban slums, with 17% patients from Interior Sindh, whereas 5% came from Baluchistan and 1% each from Punjab, N.W.F.P. and Afghanistan. Regarding the occupation of the patients' parents, it was found that 10% of the fathers were unemployed, 16% were self-employed, 14% were labourers and the remaining had other professions. Ninety percent of the mothers were housewives, whereas a mere 10% were working as teachers, seamstresses and domestic servants or as farm labour.

The size of the family ranged from 3 members to 12, the average being 7 members and the modal family size

being 6.

Seventy one percent of the fathers and 5% of the mothers were sole supporters of the family whereas 11% received financial support by other family members and relatives. The monthly income of those employed ranged from Rs.150 to 16000, the median being around Rs.2500 (Table).

Table. Monthly income in Rupees.

	Frequency
None	6
Less than 500	3
500 - 1000	3
1000 - 2000	11
2000 - 3000	27
3000 - 5000	24
Above 5000	1
Variable	14
Unknown*	2
Total	100

*The female attendants questioned were unaware of their husband's income.

The duration between the start of illness and seeking treatment at the Oncology unit varied from 5 days to 5 years. An average obtained was 11 months. Seventy three percent patients had been under treatment elsewhere, before being directed to NICH, whereas 27% came directly. Ninety three percent were satisfied with the treatment being provided at NICH, 1% were dissatisfied and the remaining 6% patients had not started treatment at the time of being questioned. However, 100% satisfaction was expressed regarding the services being provided by the staff.

Sixty one percent patients received their total medical supplies from CAA, while 29% received partial support, as they could afford part of medication. Two percent claimed to be bearing the entire cost of treatment themselves. The source of medicine was only the hospital for 6% patients. 83% had the knowledge that they were getting medicines from sources other than the NICH and 11% thought that the medicines supply was from NICH as well as from other sources.

Discussion

Cancer is the leading cause of death in children between the ages of 1 and 19 years.[1] Children with cancer suffer not only physically but psychologically as well. They may develop a sense of low self-esteem due to their condition. Cancer also affects the child's family. Parents and siblings are faced with the uncertainty of the child's future whilst coping with the demands of taking care of the child. Above all they witness the pain the child is going through.[2]

However, contrary to popular belief, childhood cancer is curable. Childhood leukaemia has a 70-80% cure rate in Singapore. Science is beginning to reveal clues about the impact of diet on cancer survivors. A diet rich in a variety of vegetables, fruits, whole grains and beans helps reduce cancer risk among individuals who have never had cancer. There are no guarantees.[3]

Nutrition and lifestyle inhibit the inflammation, oxidative damage and unregulated cell growth that are common mechanisms promoting the growth and spread of cancer.[4] However, while some adult cancers have been linked to lifestyle factors such as diet and smoking, the cause of childhood cancers-which are in most cases unpreventable - remain unknown.

Cancer treatment (chemotherapy, radiotherapy, surgery, and bone marrow transplant) is very expensive and most of the families seeking treatment at the NICH are unable to meet the cost of medical treatment and associated expenses.

The present study reveals, the modal income to be Rs.2500, which is inadequate for normal living. Under these circumstances, the reply of satisfaction as to the treatment received is to be taken with reservation, as the parents have no other options to choose.

Tertiary public health care services in Pakistan, which are already under great strain since long due to meagre allocation, are put to further stress due to prevailing poor economic conditions, resulting in insufficient fund allocation, shortage of trained staff and ever-increasing number of patients. Almost all these centres cater to the poor socio-economic group.

A wide range study by the Manitoba Centre for Health Policy and Evaluation demonstrates that poverty and poor health are closely linked. This research demonstrates a persistent gradient in the occurrence of a range of illnesses at every level of socio-economic status; everyone is affected. People with the highest levels of education and income generally have better states of health than those with median education and income, who in turn are healthier than the poor and less educated.[5]

In Pakistan, almost 70% of the population is

illiterate and a large majority live below the poverty line. Therefore, it will be a long while before the economic ills are corrected and demand for good tertiary care is met. For this interim period systems have to be devised through which reasonable tertiary care is provided. Already NGOs are working in this field. Child Aid Association is one of the oldest. It was established in 1979. Not only does it provide medicines (over 70%) but also blood from voluntary donors and supplements for the care of critically ill children at NICH. With the establishment of the Pediatric Oncology Ward at NICH, the CAA has taken a step further towards establishing the first Bone Marrow Transplant Unit in the public sector in Pakistan.

CAA is supported by philanthropic citizens, National and Provincial Zakat Council, Bait-ul-Mal-Islami London, N.D.F.C and members of association and drug industry.

The average amount spent by CAA on each patient was calculated to be around Rs.34000 per annum (only on medication). However, this figure does not accurately represent treatment costs as these vary greatly depending on the type of cancer being treated.

On a more global perspective, continued progress on increasing the survival rate for all childhood cancers, reducing the serious side-effects of cancer treatment, improving the quality of life during treatment, understanding the importance of genetics and its influences with environmental exposures, are all part of the continuing efforts of many dedicated people and institutions and international organizations, like CNCF (Children's Neuroblastoma Cancer Foundation), Children's Oncology Group (C.O.G.) and many others. Fundraising events have helped in collecting monetary support for the cause.

Great strides have been made in the overall survival rate of children with cancer. This has been the result of the advances and improvement made in the treatment of childhood cancers. More still needs to be done.

In Pakistan, as the conditions of state-run hospitals are more or less similar all over the country, model of cooperation between the hospital administration and NGO as demonstrated by this study can be adopted by other public sector tertiary care centres.

Conclusion

Majority of the patients hailed from the low socio-economic background; poor nutritional status therefore, may have contributed to their ill health and disease. They expressed satisfaction at the facilities being provided at the Oncology Ward, NICH, Karachi. However, as shown by the results of this study, the support of donor agencies, like Child Aid Association, is very important, as most of the patients are unable to bear the cost of treatment themselves.

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