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Research Article

**CROSS SECTIONAL ANALYSIS OF PARENTAL AND CHILD  
HEALTH SCENARIOS OF FAMILIES REPORTING AT  
PEDIATRICS DEPARTMENT LUH**Muhammad Zain-Ul-Abdean<sup>1\*</sup>, Aatir H. Rajput<sup>2</sup> and Muhammad Muneeb<sup>3</sup><sup>1</sup>Liaquat University of Medical & Health Sciences.<sup>2</sup>Virtual University of Pakistan<sup>3</sup>Indus Medical College, Tando Muhammad Khan.**Abstract:**

**Objective:** This study investigates the parental and child health scenario of the families presenting at the pediatric department of Liaquat University Hospital. The term health scenario here refers to disease of familial origin, hereditary lineage and infectious sort capable of affecting the family. The scenario is evaluated by studying the presence and absence of familial diseases, chronic parental illnesses and health status of siblings, major health complaints and diseases requiring urgent treatment

**Methodology:** This observational, cross-sectional analysis comprised of a conveniently chosen, non-probable sample of 100 individuals that presented at the Liaquat University Hospital. Data was collected using a structured, interview based questionnaire after taking verbal informed consent. The data collected was analyzed using Microsoft Excel 2013 and SPSS v. 19.0.

**Results:** The data comprised 67% of males and 33% females. 58% of the children required urgent treatment and the major health complaints of the children were malnourishment (42%) and dehydration (18%). Only 5% of the respondents complained that their children suffered from familial diseases. Thalessemia was the leading complaint (3%) followed by Hypertension and liver anomalies (1% each). The leading diseases discovered in mothers were Hypertension (3%), Tuberculosis (2%) and Hepatitis B and C (1% each). The common diseases discovered in fathers were Hypertension (4%), Hepatitis C (4%), Tuberculosis (2%) and Asthma (1%).

**Conclusion:** The patients presenting at the Pediatrics department of the Liaquat University Hospital were more often than not in need of urgent treatment. The major complaints were nourishment related that can be overcome by poverty and illiteracy alleviation. The acute health scenario seemed worrying yet comorbidities and chronic complaints were not present in significant levels.

**Key words:** Health Scenario, Pediatrics, Parental and Child Health.

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**INTRODUCTION:**

Children are the most disease vulnerable members of a society & child health consequently has always been a one of the most important pillars of community healthcare. The child population, steeply on the rise, now faces more diseases than ever before in history. Neglecting the health of this faction of our population is tantamount to putting the future of our world at risk.

After the 1990 United Nations children's summit, a hundred and sixty seven countries pledged to step up their efforts in child health and nutrition to meet a child related human development goals for the year 2000. But by 2000, 10.6 million children were still dying yearly, most as a result of pneumonia, diarrhoea, and neonatal causes and, in sub-Saharan Africa, malaria as well [1,2]. Malnutrition has been recognized as a principal cause in over 50% of cases [1], with zinc and vitamin A deficiencies adding up to it [1, 3].

In September 2000, 189 countries endorsed the UN millennium declaration, which defined goals for human development by 2015. Millennium development goal 4 was specific to child health, aiming to have reduced mortality in children aged less than 5 by two thirds between 1990 and 2015. Other millennium development goals aimed at reducing poverty and malnutrition and improving access to safe water, sanitation, and air quality would also contribute to improving child health [4].

Five years on, there is some, although irregular, progress, and if practice continues as usual until 2015, then many countries, particularly in sub-Saharan Africa and south Asia, will fail this goal [5]. It is now incumbent on countries and the international community to re-evaluate if the resources presently used to improve child health are being used as successfully as possible, and what strategies would ensure that any new resources attain the maximum benefit.

Some proof already exists on the cost effectiveness of selected interventions directed to improving child health in the developing world [6-8], but results have usually been founded on interventions undertaken in segregation, without accounting for costs that can be shared across interventions or the impact of altering coverage on unit costs (for example, costs per child treated). In these new cost effectiveness analyses, the WHO Choosing Interventions that are Cost Effective (CHOICE) Millennium Development Goals Team

standardized framework, methods, and tools [9-11] are used for selected interventions for major causes of childhood morbidity and mortality. They permit combinations of interventions to be analyzed simultaneously and the impact of increasing coverage to be incorporated openly.

Unpleasant facts emerge upon monitoring impact of major national neonatal and child health interventions, strategies, and policies such as Pakistan's flagship Maternal, Newborn, and Child Health Program (MNCH), which was launched in 2005. The focus of the MNCH program has been two-fold: to coordinate, improve, and promote primary health service delivery to end users and to elicit tangible behavior changes that will improve acceptance of, demand for, and utilization of those services.

The program is in the process of deploying a new cadre of 12,000 community midwives with the aim of increasing skilled birth attendance in underserved communities and thus lowering neonatal and maternal mortality through early detection and timely referral of obstetric and newborn complications (Government of Pakistan, 2010b).

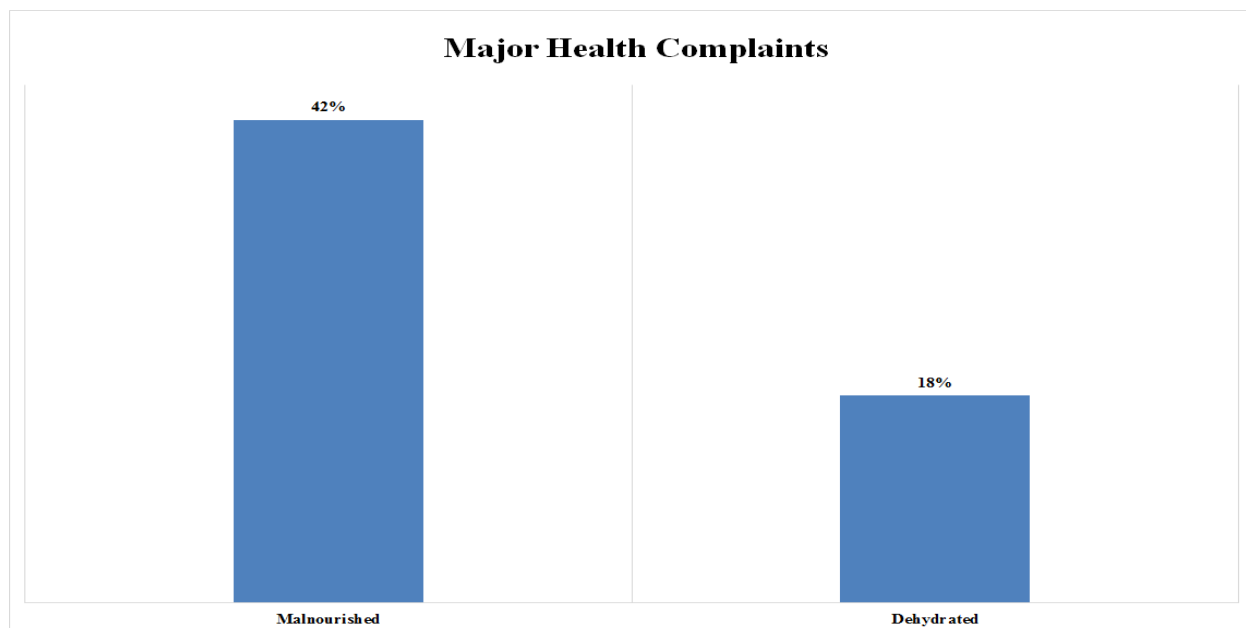
In Pakistan, neonatal, post neonatal, infant, child, and under-five mortality rates are calculated from household surveys because the vital registration system is not complete. The reliability of mortality estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Under-reporting and erroneous classification is frequent, especially for mortalities occurring early in life (World Health Organization, 2006a).

**METHODOLOGY:**

This observational, cross-sectional analysis comprised of a conveniently chosen, non-probable sample of 100 individuals that presented at the Liaquat University Hospital. Data was collected using a structured, interview based questionnaire after taking verbal informed consent. The data collected was analyzed using Microsoft Excel 2013 and SPSS v. 19.0.

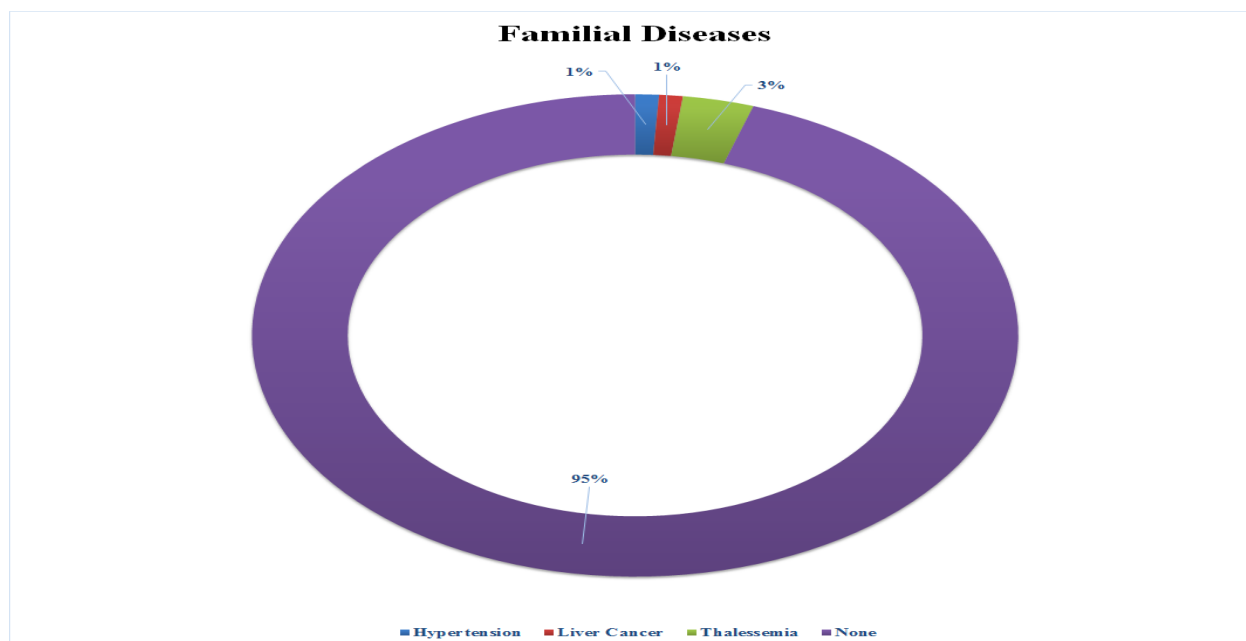
**RESULTS:**

The data comprised 67% of males and 33% females. 58% of the children required urgent treatment and the major health complaints of the children were malnourishment (42%) and dehydration (18%).



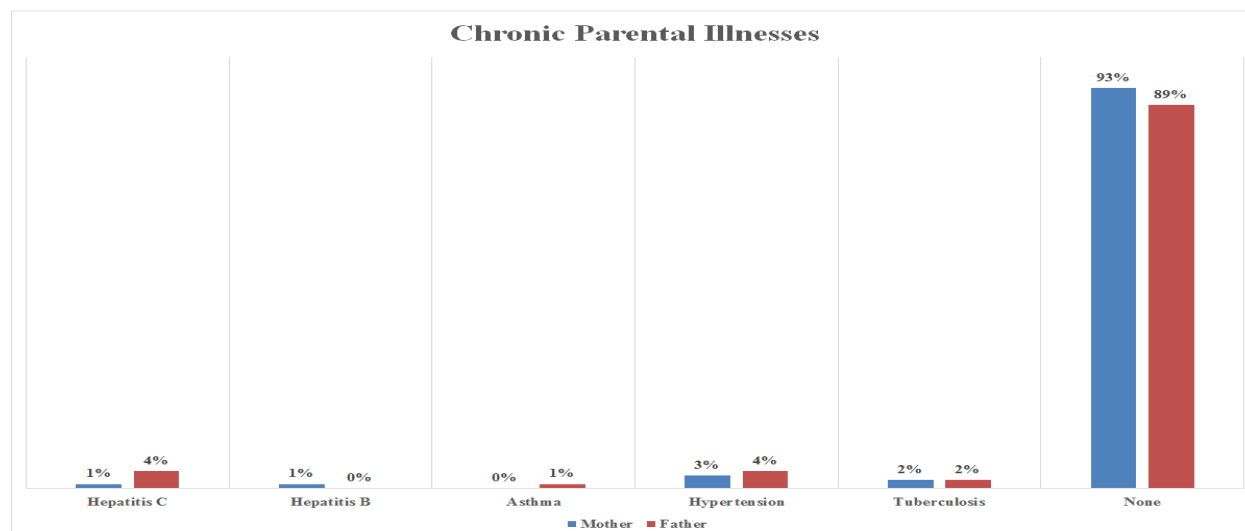
**Fig 1:** The disease are preventable and careful management can avoid hospital burden due to such diseases.

Only 5% of the respondents complained that their children suffered from familial diseases. Thalessemia was the leading complaint (3%) followed by Hypertension and liver anomalies (1% each).



**Fig 2:** Familial diseases pose a great threat to the health and wellbeing of children that are the future of the country. Careful health management and proper screening is thus advised.

The leading diseases discovered in mothers were Hypertension (3%), Tuberculosis (2%) and Hepatitis B and C (1% each). The common diseases discovered in fathers were Hypertension (4%), Hepatitis C (4%), Tuberculosis (2%) and Asthma (1%).



**Fig 3: The proportion of parents carrying familial diseases was low however, among the lot, hepatitis was worryingly present in the sample which has great chances of transmission and need to be tackled with great caution.**

#### DISCUSSION:

We have described the spectrum and relative frequencies of child health problems for a tertiary care hospital in Hyderabad. This survey shows that our study setting served the needs of a full spectrum of young patients. A wide variety of Pediatrics chief complaints and diagnoses were seen, requiring the use of diagnostic skills and procedures spanning all major Pediatrics specialties. Our population differs significantly from those previously studied. The socialized health care system elsewhere in the world eliminates financial barriers to care seen in most studies [15]. Moreover, the group under study represented a population more similar to that encountered by primary and secondary health care providers in the world, than to that encountered by specialists dealing in tertiary care hospital [15]. Despite these quite marked dissimilarities we identified only minor differences in the spectrum and frequency of illness presenting to our study setting when compared with publications from the western world in a hospital [12] and in a general community hospital emergency department [12,14]. Finally, the rate of hospitalization was higher in our institution (25% vs. 11% in the American hospital and 4% in the American general ED): our hospital is located in an urban setting with a socio-economically disadvantaged population and our physicians are

often concerned about the adequacy of parental follow-up, and therefore hospitalization is often considered. Patient age strongly influenced hospital utilization, with infants overrepresented compared with the general population (assuming a normal age distribution in our geographic area). Previous studies have shown that younger children become ill more often and are more likely to require admission [12-14, 16,17]. In this study, infants were more likely to be examined in the hospital and to be hospitalized: those age groups presumably benefit the most from the decision to have experienced paediatricians, not only residents, on staff. On the other hand, a significant number of visits was by adolescents, or even by young adults with chronic disease, and many of them required admission to the hospital. This finding may arise from the expanding age range of hospital practice in general and the trend for patients with congenital or chronic conditions of childhood to survive into adulthood and continue to seek care at pediatric facilities. The major health risks in that age group are behavioural and social rather than biomedical with high rates of injury, homicide, suicide and substance use. It is, therefore, also important that pediatricians and pediatric residents gain experience in the emergency care of late adolescents and young adults with their special concerns, needs, and behaviours regarding health

care [12,18,19]. Patient volume, chief complaint, diagnosis, and disposition were all affected by the distance from home to hospital and above all by the time of arrival. Most children were seen during day and evening hours. One of the most important reasons for overutilization of emergency services in our country is supposed to be the fact that access to office-based services depends largely on the ability to pay for these services before being reimbursed by the health insurance. In this study, the influence of the socioeconomic status on the frequency and spectrum of illness and on the admission rate seemed, however, to be modest when compared to the other factors. We believe that the data from this study may also contribute to curriculum development in training of pediatric residents and emergency medicine physicians. As the pediatric emergency care is provided by non-pediatric emergency specialists in many hospitals, our data especially suggest a need to emphasize the management of infections for emergency specialists not trained in pediatrics who care for children, given that two-thirds of all hospital visits were precipitated by acute infections.

### CONCLUSION:

The patients presenting at the pediatric department of the Liaquat University Hospital were more often than not in need of urgent treatment. The major complaints were nourishment related that can be overcome by poverty and illiteracy alleviation. The acute health scenario seemed worrying yet comorbidities and chronic complaints were not present in significant levels.

### Conflict of Interest

All the authors disclose that there is no conflict of interest associated in the preparation of this article

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