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Research Article

**SHORT STATURE; ETIOLOGICAL FEATURES IN CASES  
PRESENTING AT ENDOCRINE CLINIC OF GENERAL  
HOSPITAL LAHORE**<sup>1</sup>Dr Zabit Khan Naibzai, <sup>1</sup>Dr Naimkhan Zadrán, <sup>2</sup>Fatima Manzoor<sup>1</sup>Pims Islamabad<sup>2</sup>H.H. Sheikh Khalifa Bin Zayed Al Nayhan Hospital/ AK CMH Muzaffarabad, Azad Kashmir**Abstract:**

**Objective:** To regulate incidence of etiological aspects in short statured respondents offering at endocrine clinic of General Hospital, Lahore.

**Methods:** This descriptive cross sectional research was led at Endocrine clinic of Lahore General Hospital Lahore from May 2017 to September 2018. One hundred and twenty offspring (54 boys and 59 girls) aged 4-17 years (average 10.5±4.5) by short stature from May 2017 to September 2018 were assessed throughout that phase.

**Results:** Legitimate development interruption and family short stature were recognized as maximum mutual, 57% of altogether short stature patients. Non-endocrinal reasons as the sole object was noticed in 19 offspring. Maximum mutual etiological influences in instruction of occurrence were standard irregular of development, Hypothyroidism, Development Hormone shortage, and Celiac illness. GHD was originate in 14% of over-all patients and this encompass 47% amongst endocrinal reasons. Boys outstripped girls through relation of 3.8:2 ( $p < 0.06$ ).

**Conclusion:** Maximum mutual source of short stature was standard alternates of development as the set. Offspring by stature dropping underneath 0.5th percentile are extra probable to have pathological source.

**KEY WORDS:** Legitimate development interruption, Family short build, Development hormone shortage, Short height.

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**INTRODUCTION:**

Standard development and growth are the main worry throughout infant. Precise valuation is important for separating among standard and irregular development. In persons, development is considered through quick height velocity throughout initial 3 years of lifetime that failure increasingly till adolescence development spray happens [1]. To describe any development point, one must quantity offspring precisely and scheme apiece point (tallness, heaviness, and head perimeter) exactly. The petite height is considered into 3 key categories, main development irregularities, subordinate development illnesses and inherited petite build [2]. The maximum mutual reasons of petite height outside initial year or 2 of life remain familial short height and legitimate development interruption. Nearly slightly illness comparable renal, pulmonary and cardiac illness may produce development disappointment [3]. Medications, including glucocorticoids, chemotherapeutic drugs, therapeutic methods, radiotherapy and healthy hardness, including reduced confirmation, malabsorption, extensive use of rest essentiality or the complexity of restricted eating routines, may improve frustration. Common endocrine explanations for dissatisfaction and dwarfism are hypothyroidism, hypopituitarism (isolated GHD or another anterior pituitary hormone) [4]. The old-style hypercortisolism and Laron problem are all represented by obesity. Small stature is considered idiopathic if no causal problem can be identified. The problem is therefore continuously found in Pakistan due to a wide range of components. Among various causes, the growth hormone deficiency is a treatable purpose behind the small stature, regardless of the manner considered exceptional [5].

**METHODOLOGY:**

To regulate incidence of etiological aspects in short statured respondents offering at endocrine clinic of General Hospital, Lahore. This descriptive cross sectional research was led at Endocrine clinic of Lahore General Hospital Lahore from May 2017 to September 2018. One hundred and twenty offspring (54 boys and 59 girls) aged 4-17 years (average  $10.5 \pm 4.5$ ) by short stature from May 2017 to September 2018 were assessed throughout that phase. In this phase, 130 offspring by short physique was acknowledged, through enchanting statures of offspring that came through criticisms of short height. Tallness remained leisurely in offspring in centimeters, upper and lesser section relation strained through separating over-all tallness through inferior section and strategized on CDC and NCHS development charts. Solitary balanced short height

cases were registered in research. Maternities gave consensus for assessment and presence in research. The respondents comprised in research remained Offspring of both gender, age 4-16 year by substantial short height- 2SD that necessitate assessment by tallness unsuitable for maternities. The prohibiting standards was short height offspring through recognized disease and cases through Spartan malnutrition were similarly excepted. Among the usual variety packages were CGD (i.e. proportional small growth size with a run of mill improvement rate, delayed skeletal improvement consistently with a family lineage of granted pubertal progression or late energetic progress spurt) and FSS, which is proportional small growth with normal improvement rate, skeletal age as well as chronological age without major problems. The investigation of celiac disease was performed by screening against tissue transglutaminase Ig A, which was sought by histopathological evaluation of small intestinal biopsy. The data were poor somewhere around the quantifiable group for the human sciences (SPSS. 23).

**RESULTS:**

Legitimate development interruption and family short stature were recognized as maximum mutual, 57% of altogether short stature patients. Non-endocrinal reasons as the sole object was noticed in 19 offspring. Maximum mutual etiological influences in instruction of occurrence were standard irregular of development, Hypothyroidism, Development Hormone shortage, and Celiac illness. GHD was originate in 14% of over-all patients and this encompass 47% amongst endocrinal reasons. Boys outstripped girls through relation of 3.8:2 ( $p < 0.06$ ). The over-all of 130 offspring through substantial short height -2SD were encompassed in our research. Regular age of offspring were 10.6 years, ( $\pm SD = \pm 4.5$  years) by an age choice of 4 – 16 years. 63 (49%) were woman and 67 (51%) were man. Amongst 130 patients 74% had tallness underneath 0.5th centile on NCHS development charts. Past of concinnity was existing in 69 (52%) offspring ( $p$ -value  $< 0.0002$ ). Past of additional short height family participant was existing in 27 (21%) cases. 3 key etiological sets were recognized. Standard variant of development interruption was maximum common set (52%) in judgement to endocrinal illnesses (29%) and non-endocrinal illnesses (19%). Among the endocrine causes of 130 cases 17 (12%), GHD and 15 had hypothyroidism. Celiac disease was considered the driving non-endocrine cause of a small stature in 12 patients. Other non-hormonal reasons for the dwarfism were relentless kidney frustration 6(4%), Turner syndrome 5(4%), familial rickets 7 (5%),

endless liver disease 2(1%). All examples of GHD had an age over several years and 93.5% fell below the 0.5th centile in the NCHS growth chart.

**Table-I: Mutual sources of short physique: No (%)**

Etiology	Male	Female	Total
Standard variant	26 (26%)	29 (29%)	55 (55%)
Growing hormone	4 (4%)	9 (9%)	13 (13%)
Hypothyroidism	12 (12%)	3 (3%)	15 (15%)
Chronic renal letdown	1 (1%)	2 (2%)	3 (3%)
Celiac illness	4 (4%)	4 (4%)	8 (8%)

**Table-2 Contrast of etiology of short height by other researches.**

	Lindsey	R Moayeri	H Bhadra	SK Colaco P	Own study
Usual difference of growth	20.5%	30.1%	47%	15.9%	80%
GHD	19.5%	13%	23.4%	7.4%	2.5%
Turner Disease	7.4%	3%	4.5%	7.4%	1.5%
Hypothyroidism	15%	10%	08%	01%	14.2%
Long-lasting universal illnesses	04%	8.5%	17%	10%	12.4%

### DISCUSSION:

In this evaluation as a single substance, the course of mill variations was responsible for 59% of small varieties and made them a particularly common explanation. According to generally accepted estimates, this recognition is scattered near the study by Sultan Met al., where CGD was seen at 34.5% and is thus the most common component [6]. Small stature is a sustained and remarkable clinical presentation performed by pediatricians worldwide. By definition, 4% of people fall into this group. A shift in the examination and start of treatment of a basic problem can lead to impotence to reach the genetic potential in stature [7]. Fortunately, most of the small children by far are a standard variety that accounts for more than 66% of small adolescents. These common varieties of small animals do not require curative treatment, but only comfort and observation of progress is usually satisfactory [8]. Mostly essential for the endocrine causes was celiac disease in 7(5%) of 130 hard and rapid cases, which is not surprising in various studies. In the end, the most important purpose behind the small stature was the locomotion of the mill variations as a social event. In the people it was CGD and in the women FSS [9]. The same goal was pursued in India. Another critical finding of this research is that all occurrences of psychotic dwarfism are after checking the progress impediment, the stature fell below 0.5

percentile in the NCHS improvement diagrams if it looked different with respect to the course of mill varieties, where only 42% of the cases fell below 0.4 percentile. The obstacles to this evaluation consolidate short follow-up actions that are not necessary for such investigations [10].

### CONCLUSION:

Maximum offspring with short height do not have an endocrine illness. Offspring with tallness dwindling underneath 0.5th percentile is extra possible to have pathological reason. Our current research proposes occurrence of substantial variance in etiology of short height in the current people associated to extra parts of biosphere.

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