

## Editorial

# The Evolution of Paediatric Orthopaedics in Pakistan: Past, Present and Future.

*Anisuddin Bhatti, Saddam Mazar Baloch*

Over the years, Paediatric Orthopaedics has evolved beyond deformity correction, trauma management, bone and joint infections and metabolic diseases to embrace Social Orthopaedics. This addresses and tackles to: restore function, prevent disability, assist for optimal growth, provide psycho-socio-economic aid through various support societies and rehabilitation centres; all to prevent lifelong stigma on affected individual and alleviate psycho-social burden on patients, parents and communities. Mostly, these goals are achieved through early recognition and timely management of congenital, developmental, metabolic and post-traumatic sequelae and deformities, using the best evidence-based conservative protocols, mini-invasive surgeries, limb preservation and deformity correction-lengthening surgeries.

However, over the decades in our region, the Paediatric orthopaedics was essentially practiced by general orthopaedic surgeons and few paediatric surgeons. They mostly handled paediatric fractures with primitive techniques available then. That included conservative casting, tractions to open methods by use of Rush pins, K-wires in paediatric fractures. While congenital deformities; including congenital-Developmental Dysplastic hip (DDH,) Clubfoot (CFD), Vertical Talus (CVT), and Congenital Knee Dislocation (CKD) were mostly treated with extensive open reductions with significantly compromised results. While high majority of these cases including scoliosis were either left untreated or inadequately treated with significantly compromised outcomes at adolescence. These approaches of inadequate management, were also being related by folks, friends and fraternity of medical practitioners to various superstitious belief among community and ignorant health care caregivers, that: “surgery is a better option than cumbersome long duration conservative treatment in CFD, CVT, CKD and while other relates “surgery in these deformities is, better to be done once child is old enough” [1,2].

Breaking the Barrier of conceptually delayed commencement of treatment of congenital-developmental MSK deformities the **Pakistan Orthopaedic Association”** (POA) established **“Paediatric Orthopaedic Forum”** (POF) in 2006; that played a pivotal role to fosters a bridge between local realities with international benchmarks. The POF accomplished the target with a structured program of creating awareness among folks and medical fraternity; held series of public camps, media propagation sessions and hand on skill transformation workshop. That included Clubfoot Ponseti management, DDH, CKD, CVT bracing casting and early interventions as minimally required. That also included Paediatric trauma courses, mini-invasive surgical techniques and Cerebral Palsy Reconstruction Surgery workshops. These workshops were initially carried out by POF-POA faculty in collaboration with regional health facilities and later developed multidisciplinary collaboration with international Paediatric Orthopaedic community. To accomplish targets a structured 3-phase program of **“Pakistan Clubfoot Disability Prevention Program** (Pak-CFDP) was developed and implemented phase 1, successfully from 2006-2012 by sensitization of orthopaedic community, family physicians and folks with series of awareness programs, clubfoot camps and media programs. In the context the 1<sup>st</sup> Paediatric Orthopaedic Seminar and Ponseti workshop was held on 25-26 November 2006. followed by series of Ponseti workshops were held twice a year. During 2008 Pak-Orthocon the international experts Prof. DK Taneja and Dr. Yasir Elbatrawy were invited for Pre-conference Ponseti workshop and full day Paediatric Orthopaedic session. Subsequently series of Ponseti workshops, educational programs and

public medical camps were held during 2008-2012 with international participation by Dr. Zaid Al Abaudi, Marc Sinclare and other experts. An outstanding milestone was witnessed during Pak-Orthocon 2012, wherein Prof. Jose A Morcuende, Prof. Shafiq Pirani were invited to hold Ponseti CF workshop and deliberated their experience in Paediatric in Orthocon sessions. This great milestone paved way for robust creation of “**Paediatric Orthopaedic Society of Pakistan** (2012), **Ponseti International Pakistan** (2013) and creation of Pakistan Clubfoot registry hosted by ICR. These events opened venues for in-house mentorship opportunities at Ponseti International Association, IOWA-USA with Prof. Jose Morcuende and at Sao Paulo Brazil with Dr. Monica Nogueira). Following successful implementation of phase I Pak-CFDP (2006-2012), Phase II “**Mentorship Training Opportunities**” (MTO) sponsored by PIA-USAID leadership development was held for in-house residential hand on skill training for a two weeks continuous duration for POA members was conducted by native Ponseti faculty spread over to during 2014-2016. The Phase III scale-up (2016-to-date) was then adopted by mentors & mentees of MTO in their regions. Who thereafter established 160 dedicated clubfoot clinics all over Pakistan. The testimony of success of Pak-CFDP, its implementations and outcome has significantly endorsed in Clubfoot Disability: Model for Sustainable Health Systems Programs in Three Countries, published by Ponseti International Association from University of Iowa in 2015 [7] and barrage of publications on Ponseti methodology indicating significant decline in age of 1st consult for CFD from walking age to soon after birth and good bye to extensive surgeries like Turco’s PMR etc and Kites conservative methodology [3,4,5,6]. The scale-up programs interestingly encouraged to hold live surgery workshops on other Paediatric deformities and trauma management with up-date techniques and multiple hand on training courses including DDH, CVT, CKD, Cerebral palsy reconstruction and mini-invasive technique workshops on Paediatric trauma. This scale-up multidisciplinary workshops, seminars and interactive courses encouraged the native POSP - POA community to “**Paediatric Orthopaedic Registry of Pakistan**” **PORP**, launched in September 2023 and got publish evidence-based research, aligned with contemporary global trends and playing another pivotal role to fosters a bridge between local realities with international benchmarks.

In the evolution of Paediatric Orthopaedics in Pakistan the remarkable milestone includes the POA and POSP scholarships for one-year durations and the most recent one eagerly awaited the second fellowship “**FCPS Paediatric Orthopaedics**”. CPSP has started this 2-years program with examination in January 2025 and till date accredited 15 dedicated Paediatric Orthopaedics units, all-over country, providing international benchmark facilities.

In an era where knowledge dissemination is on tips and trends of seconds, it is imperative for progress to bring a platform that shall address the pressing priority to document, disseminate, and publish the native research to elevate Paediatric Orthopaedic care in Pakistan in alignment with global trends. The establishment of JPOSP reflects our collective commitment to promoting research, improving clinical practice, and encouraging scholarly engagement among orthopaedic surgeons, trainees, and allied professionals. To advance these aims, JPOSP confidently invite you to contribute original articles, case reports and evidence-based literature reviews, highlighting truly unique disease patterns, ever encountered in the developed world, for the successive issue of JPOSP. This is our beginning, we shall move forward with the conviction that every child deserves expert, evidence-based orthopaedic care and that the knowledge fostered within these pages will help make that a reality.

## References.

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