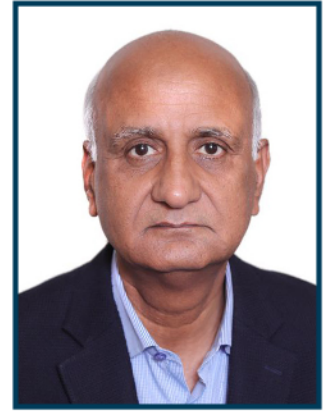




**First Annual Report  
2022 - 2023**

**Paediatric Orthopaedic  
Registry Pakistan**

**PORP**



## Preface

It is my great honor and privilege to write the preface of the 1st Annual Report of the Pediatric Orthopedic Registry Pakistan (PORP). As medicine is evolving and advancing every day, our understanding on clinical assessment and treatment has also improved a lot. This Paediatric Orthopaedic Registry Pakistan was initiated in 2019 and launched in 2021 to collect the prospective data of children with Musculoskeletal deformities and treatment. It will improve quality of care and prevent disabilities and deformities.

The PORP is simple and easy to use. We encourage all the Paediatric Orthopaedic Surgeons to join the PORP and begin entering their data. This will improve clinical practice and research methods for better treatment and prevention of deformities.

I must express my sincere appreciation for the excellent work done by Prof. Dr. Anisuddin Bhatti Founding Director PORP, Prof. Dr. Syed Shahid Noor, Chairman, Registry Committee, HealthRAB and Prof. Dr. Zakiuddin Ahmed General Secretary, HealthRAB. Prof. Dr. Anisuddin Bhatti's dedication, hard work and attention has exceeded my expectations and wanted to take a moment to acknowledge his contributions and I am very grateful to have this opportunity to work with him.

The first annual report of PORP highlights the Data of DDH across the country. The Club Foot data is linked to the International Clubfoot registry and the long-term goal is to include other Musculoskeletal conditions.

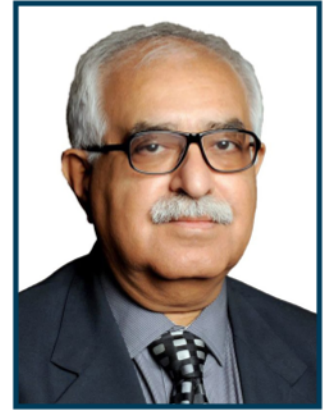
I like to thank you for incredible work of the whole team of PORP and wish the future work will benefit the Paediatric Orthopaedic Society and surgery in Pakistan.

Sincerely,

Prof. Dr. Rana Dilawaiz Nadeem

Past President, POSP

## Message



Clinical registries serve the purpose of gathering, organizing, and retrieving data for evaluating epidemiological status and treatment outcomes. The information collected helps in establishing best practices, treatment guidelines, supporting research, and planning future preventive and therapeutic activities. However, the use of clinical registries faces challenges in terms of sustainability and requires dedicated participation and continuous progress. To enhance the significance of registries, stakeholders must go beyond just collecting and warehousing data, and use modern data analytics to develop further preventive therapeutic strategies and research publications.

PORP was launched in September 2021 under the patronage of the Paediatric Orthopaedic Society Pakistan, with academic and technical support from Health Research Advisory Board (HealthRAB) and research support from PharmEvo Pakistan. The development of PORP involved designing detailed CRF forms with the latest analytic technology to make it password-protected, user-friendly, and provide easily retrievable data. The Core Committee especially Prof. Dr. Mehtab Pirwani and Prof. Dr. Amin Chinoy, and Steering Committee of PORP, along with Prof. Dr. Zakiuddin Ahmed and Ms. Marium Soomro from HealthRAB, and Mr. Nauman Siddiqui from PharmEvo, must be acknowledged for their support in establishing and maintaining the PORP database.

To begin with, PORP contains a CRF to gather data for Paediatric MSK Deformities, Developmental Dysplastic Hip (DDH) and Club Foot Deformity (which is linked to the International Clubfoot registry). The next addition to PORP will be Perthes' disease and thereafter Paediatric MSK injuries. The baseline DDH data can be entered in just 1.5-2 minutes, and the follow-up takes only half a minute. The data is strictly password-protected, and the user can easily retrieve total or partial data as desired for the purpose.

Currently, there are 24 registered participants across Pakistan; however, only 11 users are actively contributing to this registry. The current report includes 18 months of data including frequencies and distribution etc. Specific outcome data is protected by the principal investigator. That data can be used in facilitating personal clinical audits, enhancing patient care, and planning to overcome difficulties-complications encountered as evaluated on data review.

The success and sustainability of PORP depend on the continuous support of the steering committee members and the registered participant. I hope that the registered participant shall continue to support their own PORP and encourage others to increase the number of stakeholders.

Sincerely,

Prof. Dr. Anisuddin Bhatti

Founding Director, PORP



## Message

I am delighted to present the 1st Annual Report of the Paediatric Orthopaedic Registry Pakistan (PORP). This report marks a significant milestone for the Paediatric Orthopaedic Society Pakistan (POSP) and the Health Research Advisory Board (HealthRAB) who joined forces to initiate this registry in November 2019.

The PORP was established with the primary objective of systematically gathering and organizing information on paediatric musculoskeletal (MSK) issues in a structured and scalable manner. The registry initially focuses on Developmental Dysplasia of the Hip (DDH) and will expand its scope to other MSK issues including Perthes, and Paediatric Fractures etc. in the near future. This report highlights the progress made by PORP since its inception and provides an insight into the registry's contribution to advancing paediatric orthopaedic research in Pakistan. It showcases the dedication and commitment of the POSP and HealthRAB teams in the successful implementation of this project. On behalf of the POSP and HealthRAB, I would like to express my heartfelt gratitude and appreciation for Prof. Dr. Anisuddin Bhatti for his outstanding leadership and unwavering commitment towards the successful implementation of this registry. I would also like to thank and congratulate all the participants who have contributed to PORP, making it a valuable resource for improving paediatric orthopaedic care in Pakistan. We look forward to the continued growth and success of this registry.

Sincerely,

Prof. Dr. Syed Shahid Noor

Chairman, Registry Committee, HealthRAB



## Message

It is with great honour that I present you the 1st Annual Report of the Pediatric Orthopedic Registry Pakistan (PORP). This report highlights the significant progress made by the Paediatric Orthopaedic Society Pakistan (POSP) and the Health Research Advisory Board (HealthRAB) in establishing this registry. HealthRAB, a registered society, is a think tank of senior clinicians, researchers, and academicians committed to developing the health research ecosystem. HealthRAB has established several national disease registries, including the Cardiology, Orthopaedics, Gynaecology, and Diabetes registries. These registries have been instrumental in improving clinical care and developing evidence-based treatment protocols. Establishing national registries is crucial for identifying gaps in care, tracking outcomes, and ultimately improving patient outcomes. PORP is an important step forward for paediatric orthopaedic care in Pakistan and a model for other countries looking to establish similar registries. PORP plays a crucial role in systematically gathering and organizing information on paediatric musculoskeletal issues in a structured and scalable manner. This registry is an important resource for improving the quality of paediatric orthopaedic care in Pakistan. However, it is not just limited to Pakistan; I am positive that PORP will play a pivotal role in improving clinical care and developing evidence-based treatment protocols for paediatric orthopaedic conditions worldwide. A special thanks to Prof. Dr. Anisuddin Bhatti, without his support and leadership, this project would not have been possible. I would like to commend the POSP and HealthRAB teams for their dedication and hard work in establishing the PORP. Their efforts have resulted in an invaluable resource for improving the quality of paediatric orthopaedic care in Pakistan.

Sincerely,

Prof. Dr. Zakiuddin Ahmed

General Secretary, HealthRAB



## Message

I am privileged to write for Paediatric orthopaedic registry (PORP) as President of Paediatric orthopaedic society of Pakistan( POSP). Prof Annisuddin Bhatti, the then president of POSP was instrumental in developing the registry , the first ever registry for DDH in Pakistan and probably in region as well. Since its inception the registry has grown tremendously and surgeon all over Pakistan are registering there DDH operated cases. The entries have now touched almost 650. Data submitted to PORP is well protected and sharing can be done only with the consent of principle author. I am hopeful that PORP will grow more in near future making it a successful tool too for future research projects

Sincerely,

Prof. Dr. Sikandar Hayat

President, POSP

## List of Editors

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### **Prof. Dr. Anisduddin Bhatti**

Founding Director, PORP



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### **Prof. Dr. Zakiuddin Ahmed**

General Secretary, HealthRAB



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### **Ms. Marium Soomro**

Coordinator, PORP  
Manager, HealthRAB



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## Introduction to PORP

The Paediatric Orthopaedic Society Pakistan (POSP) initiated a pilot project in November 2019 in Collaboration with Health Research Advisory Board (HealthRAB) to establish the “Paediatric Orthopaedic Registry Pakistan” (PORP).

The objective of this pilot project was to systematically gather and organize information on paediatric musculoskeletal (MSK) issues in a structured and scalable manner. The PORP serves as the primary registry for POSP and will initially focus on three common congenital/developmental MSK issues, namely DDH, Perthes and Paediatric Fractures. The registry will expand to include other MSK issues after a year or two.

This PORP shall be owned by POSP in collaboration with HealthRAB. PORP is supported by an unrestricted research grant by PharmEvo.

To ensure the smooth functioning of PORP, a steering committee and core group have been established with the responsibility of supervising the PORP operations in accordance with the agreed terms of reference.

## Aims & Objectives

- To collect, enter & retrieve data of Paediatric MSK problems, procedures carried out in order to establish data base.
- Data that can be used to improve the quality of care prevent disabilities developing among deformities.
- Data to provides actionable information to guide PORP user, for decision-making and research with overall benefit to the patients care & Disability prevention. Data that shall be strictly Password protected.
- Cumulative data retrievable by the user in CVS / PDF format for their study & research.
- The PORP may publish cumulative general demographic data for a scientific evidence, that to improve health Policy.

## Steering Committee

S. No	Steering Committee Members	Role
1	Dr. Anisuddin Bhatti	Director
2	Dr. Zakiuddin Ahmed	Secretary
3	Dr. Mehtab Ahmed Pirwani	Member
4	Dr. Syed Shahid Noor	Member
5	Dr. Rana Dilawez Nadeem	Member
6	Dr. Mohammad Amin Chinoy	Member
7	Dr. Javed Iqbal	Member
8	Dr. Atiq uz Zaman	Member
9	Dr. Sikander Hayat	Member
10	Dr. Nusrat Rasheed	Member
11	Dr. Saeed Ahmed	Member
12	Dr. M. Aslam Baloch	Member
13	Ms. Marium Soomro	Coordinator

## Core Committee

S. No	Core Committee Members	Role
1	Dr. Anisuddin Bhatti	Director
2	Dr. Zakiuddin Ahmed	Secretary
3	Dr. Mehtab Ahmed Pirwani	Member
4	Dr. Rana Dilawez Nadeem	Member
5	Dr. Mohammad Amin Chinoy	Member
6	Dr. Saeed Ahmed	Member
7	Dr. Nusrat Rasheed	Member
8	Ms. Marium Soomro	Coordinator

## Participating Institutions by Province

Province	City	Participating Institutions
Balochistan	Quetta	Bolan Medical Complex Hospital
		Sheikh Khalifa Bin Zahid Medical Complex
		Tariq Hospital
KPK	Peshawar	Khyber Teaching Hospital
		Prime Teaching Hospital
Punjab	Faisalabad	Children's Hospital
	Lahore	Ghurki Trust Teaching Hospital
	Rawalpindi	Benazir Bhutto Hospital
Sindh	Karachi	Indus Hospital and Health Network (IHHN)
		Jinnah Postgraduate Medical Center
		Kutiyana Memon Hospital
		Liaquat National Hospital
		NMI Hospital Saddar
		Neurospinal & Cancer Care Institute
		Saifee Hospital
	Ziauddin Hospital, Clifton Campus	
	Larkana	Shaheed Mohtarma Benazir Bhutto Medical University, Chandka Medical College Hospital
	Sukkur	Bhatti Hospital

## Registered Participants

S. No	Names
1	Dr. Adeel Ahmed Siddiqui
2	Dr. Anisuddin Bhatti
3	Dr. Asif Peracha
4	Dr. Atiq uz Zaman
5	Dr. Ayesha Saeed
6	Dr. Badruddin Sahito
7	Dr. Jagdesh Kumar
8	Dr. Javed Iqbal
9	Dr. M. Aslam Baloch
10	Dr. Malik Waseem Ahmed
11	Dr. Mehtab Ahmed Pirwani
12	Dr. Mohammad Amin Chinoy
13	Dr. Muhammad Jamil
14	Dr. Nadeem Baloch
15	Dr. Nusrat Rasheed
16	Dr. Pervez Ali
17	Dr. Rana Dilawez Nadeem
18	Dr. Saeed Ahmed Jadoon
19	Dr. Salik Kashif
20	Dr. Sikander Hayat
21	Dr. Syed Shahid Noor
22	Dr. Zaki Idrees
23	Dr. Zamir Ahmed Soomro

## Contributors

S. No	Names
1	Dr. Amin Chinoy
2	Dr. Anisuddin Bhatti
3	Dr. Asif Paracha
4	Dr. M. Aslam Baloch
5	Dr. Atiq Uz Zaman
6	Dr. Ayesha Saeed
7	Dr. Javed Iqbal
8	Dr. Muhammad Jamil
9	Dr. Pervez Ali
10	Dr. Saeed Ahmad Jadoon
11	Dr. Zamir Ahmed Soomro

# Data Report

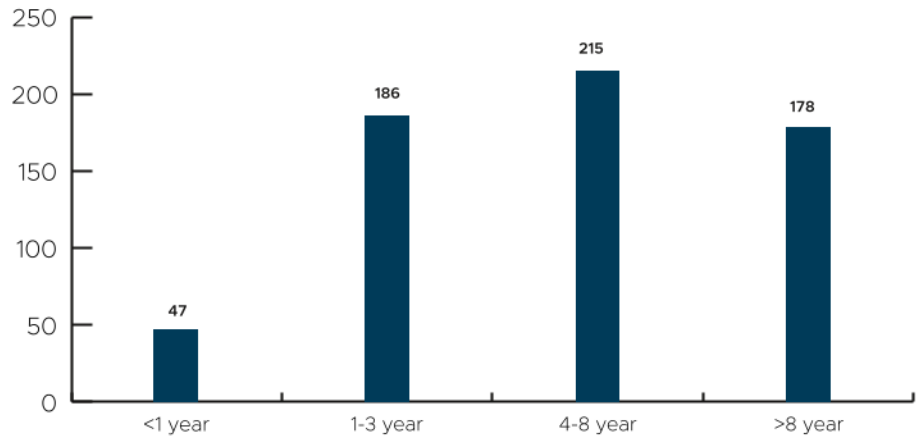
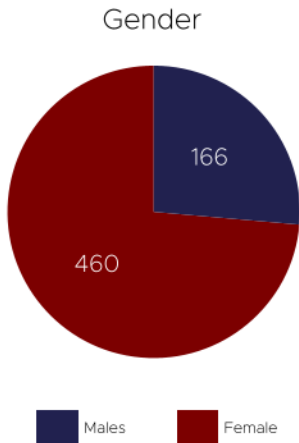
## 2022 - 2023

Number of Enrolled Cases : 626

# Baseline

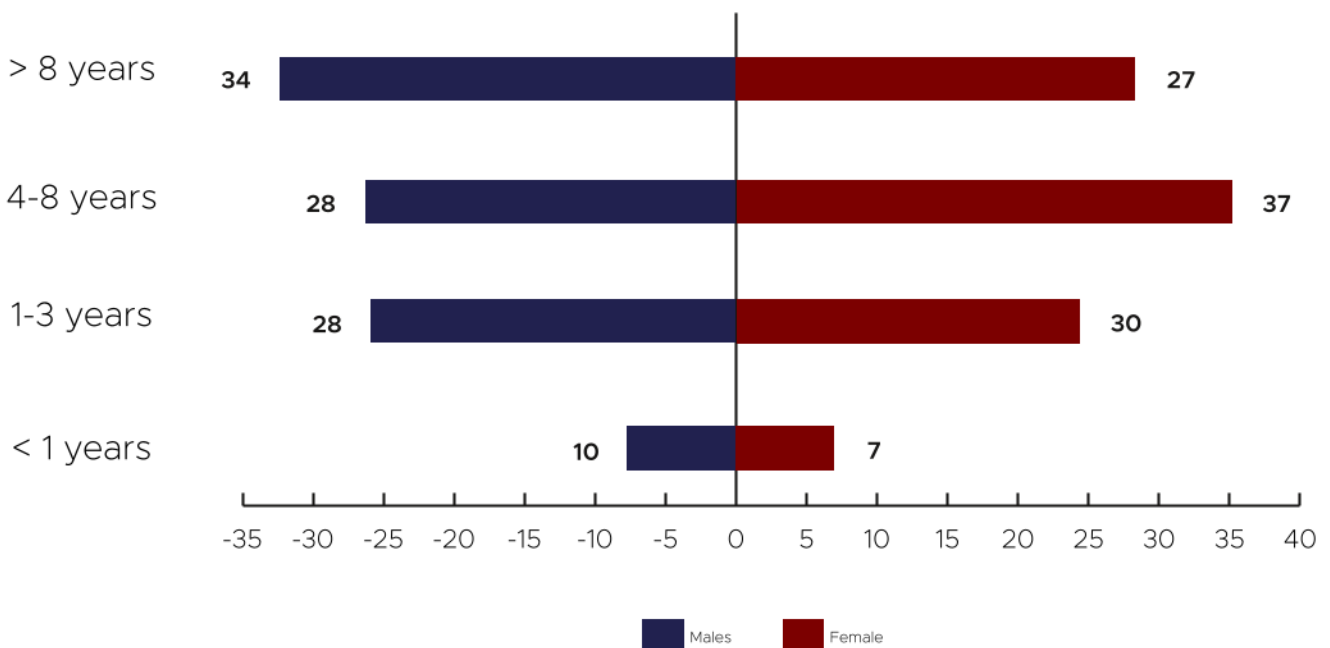
## Age & Gender Of Respondents

n=626

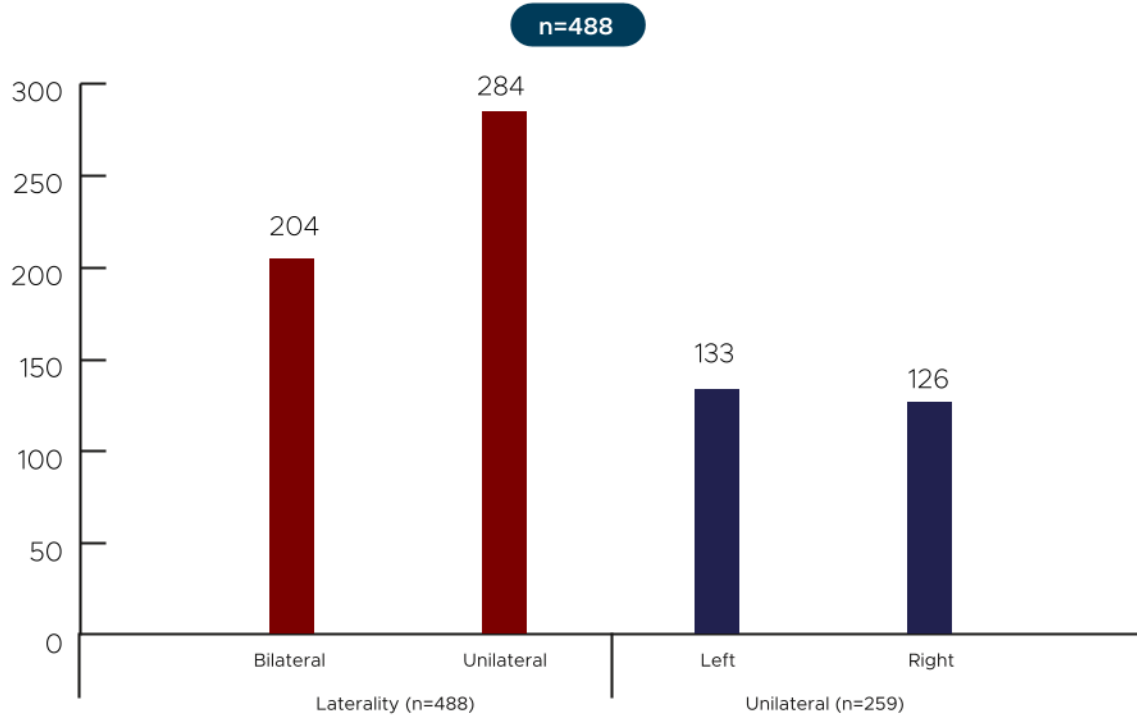


## Age & Gender Correlation (%)

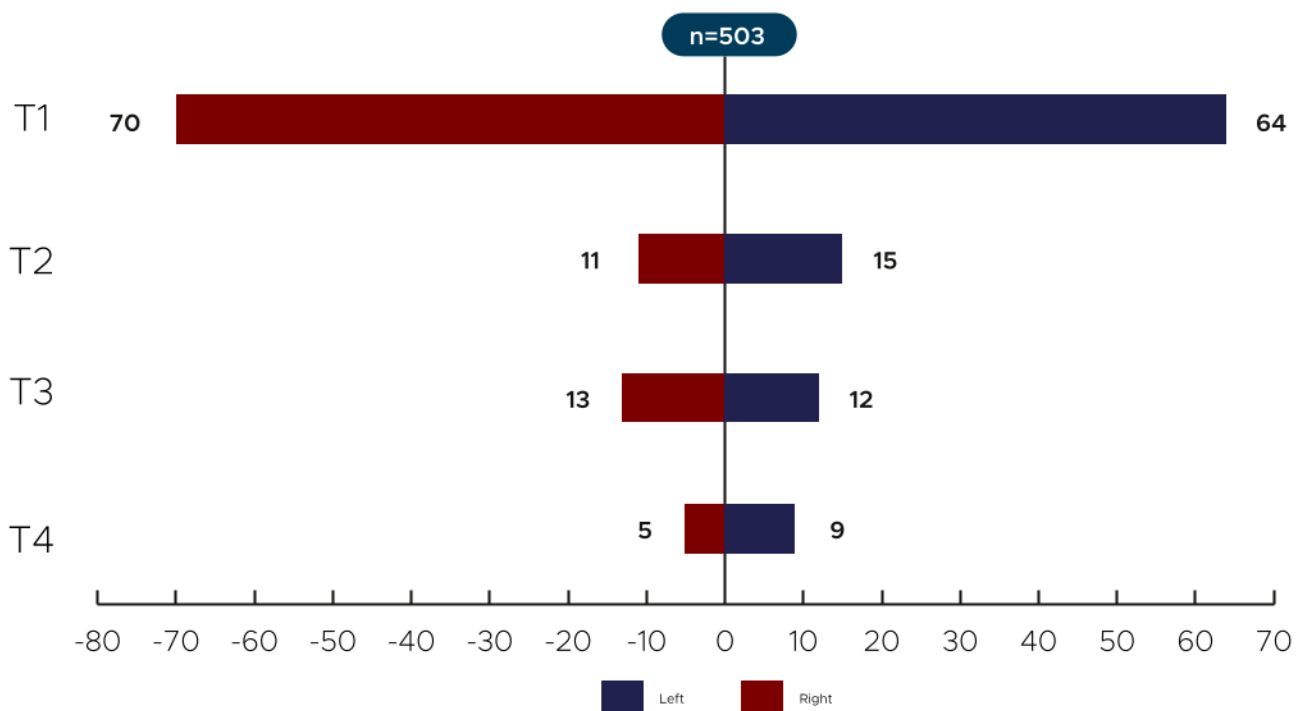
n=626



## Laterality: Unilateral & Bilateral

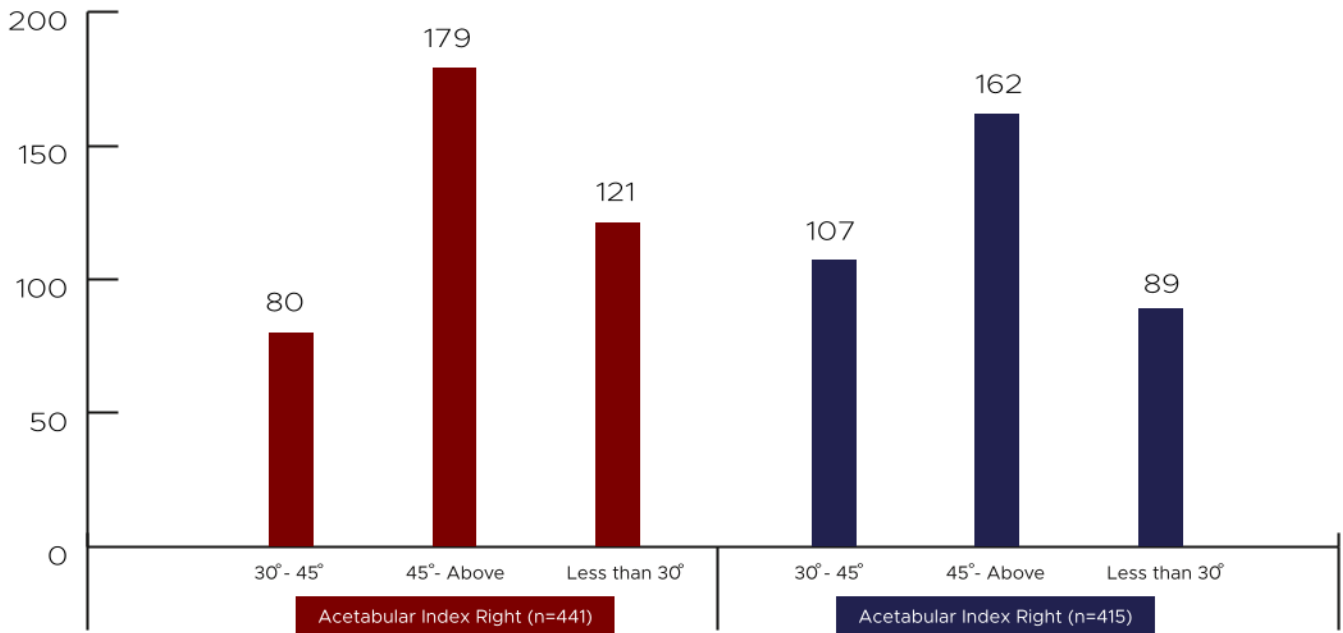


## Tonnis Height Dislocation

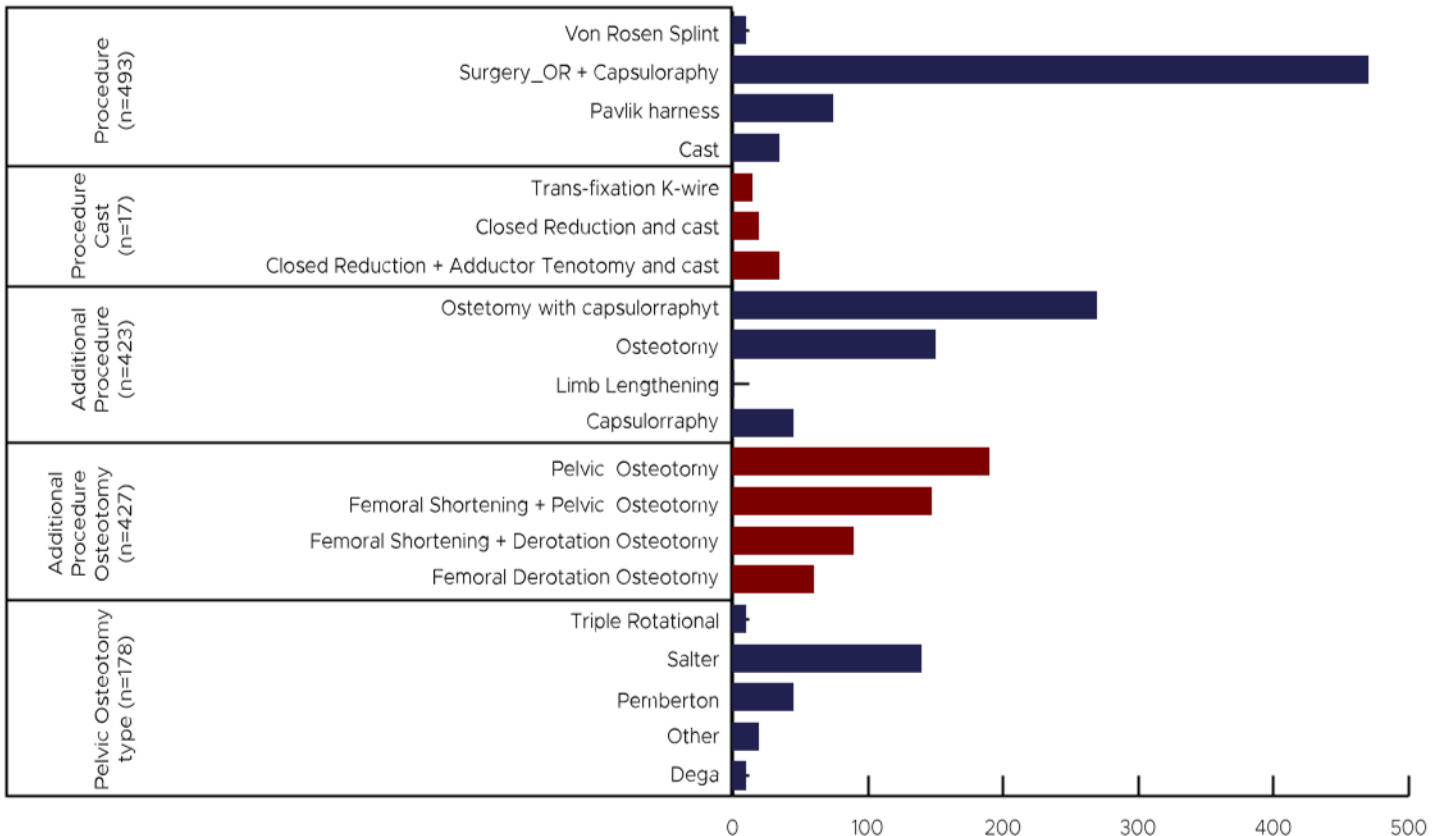




# Acetabular Index



# Procedures Performed

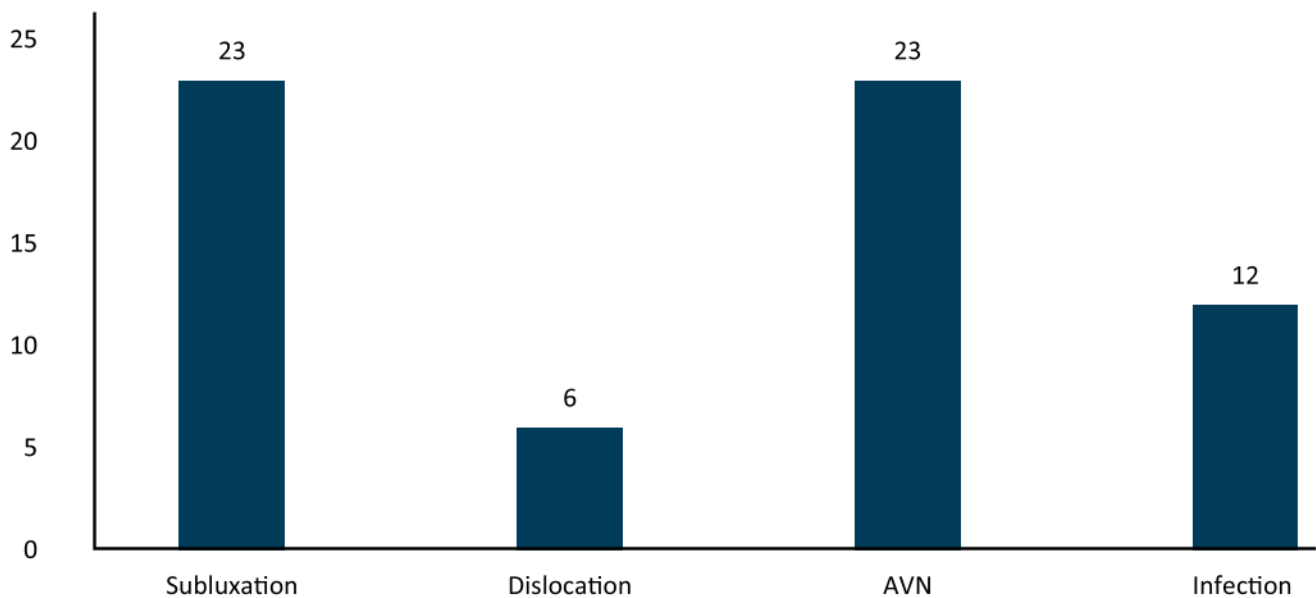


## Follow-Up

Follow-Up Duration	N (%)
< 1 year	461 (95)
1 - 3 years	13 (3)
3 - 7 years	6 (1)
7 - 10 years	1 (0)
> 10 years	2 (0)
<b>Total</b>	<b>*483 (100)</b>

\* Follow-up cases not entered / loss to Follow-up

## Type of Complications



\*Single complication: 48 cases  
Multiple complications: 8 cases

## Case Report Forms

# Disease Index Form



### Paediatric Orthopaedic Registry Pakistan (PORP)

A. Demographic Data					
1	Registration/MR No		2	Visit Date	
3	Consent: Informed consent taken from parents/ guardian for registry, photographs and publication	<input type="checkbox"/> Yes <input type="checkbox"/> No	4	Patient Name	
5	Father Name		6	DOB	
7	Age	<input type="checkbox"/> Week <input type="checkbox"/> Month <input type="checkbox"/> Year	8	Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
9	Province	<input type="checkbox"/> Sindh <input type="checkbox"/> Punjab <input type="checkbox"/> Balochistan <input type="checkbox"/> Khyber Pakhtunkhwa <input type="checkbox"/> Gilgit Baltistan <input type="checkbox"/> Azad Kashmir	10	City	<input type="checkbox"/> Karachi <input type="checkbox"/> Hyderabad <input type="checkbox"/> Sukkur <input type="checkbox"/> Larkana <input type="checkbox"/> Nawabshah <input type="checkbox"/> Mirpurkhas <input type="checkbox"/> Shaikapur <input type="checkbox"/> Jacobabad <input type="checkbox"/> Khairpur <input type="checkbox"/> Lahore <input type="checkbox"/> Faisalabad <input type="checkbox"/> Islamabad <input type="checkbox"/> Rawalpindi <input type="checkbox"/> Gujranwala <input type="checkbox"/> Multan <input type="checkbox"/> Bhawalpur <input type="checkbox"/> Sargodha <input type="checkbox"/> Sialkot <input type="checkbox"/> Rahim Yar Khan <input type="checkbox"/> Quetta <input type="checkbox"/> Hub <input type="checkbox"/> Sui <input type="checkbox"/> Der Allah Yar <input type="checkbox"/> Chaman <input type="checkbox"/> Gwadar <input type="checkbox"/> Peshawar <input type="checkbox"/> Abbottabad <input type="checkbox"/> Mardan <input type="checkbox"/> Nowshera <input type="checkbox"/> Dera Ismail Khan <input type="checkbox"/> Astore <input type="checkbox"/> Bunji <input type="checkbox"/> Chilas <input type="checkbox"/> Danyor <input type="checkbox"/> Gahkuch <input type="checkbox"/> Gilgit <input type="checkbox"/> Skardu <input type="checkbox"/> Hunza <input type="checkbox"/> Muzaffarabad <input type="checkbox"/> Mirpur <input type="checkbox"/> Rawal Kot <input type="checkbox"/> Kotli <input type="checkbox"/> Dhir Kot <input type="checkbox"/> Bagh <input type="checkbox"/> Hajira <input type="checkbox"/> Bhimbar <input type="checkbox"/> Plandri <input type="checkbox"/> Chakswari <input type="checkbox"/> Other: _____
11	Hospital		12	Contact # 1	
13	Contact # 2		14	Parent's NIC #	
15	Email ID		16	Assessment done by	
B. Disease Index: Group A					
1	Club Foot	<input type="checkbox"/> Yes <input type="checkbox"/> No	2	Development Dysplastic Hip (DDH)	<input type="checkbox"/> Yes <input type="checkbox"/> No
C. Disease Index: Group B					
1	Perthes	<input type="checkbox"/> Yes <input type="checkbox"/> No	2	Pediatric Fractures	<input type="checkbox"/> Upper limb long bones <input type="checkbox"/> Lower limb long bones
3	Epiphyseal Injuries	<input type="checkbox"/> Shoulder <input type="checkbox"/> Elbow <input type="checkbox"/> Wrist	4	Pediatric Trauma Dislocation	<input type="checkbox"/> Shoulder <input type="checkbox"/> Elbow <input type="checkbox"/> Hip

# Disease Index Form



**Health  
Research  
Advisory  
Board**  
Developing Health Research Evidence of Pakistan

		<input type="checkbox"/> Hip-Delbet type <input type="checkbox"/> Knee <input type="checkbox"/> Ankle <input type="checkbox"/> Talus			
5	Slipped Capital Femoral Epiphysis(SCFE/SUFE)	<input type="checkbox"/> Yes <input type="checkbox"/> No	6	Coxa Vara	<input type="checkbox"/> Congenital <input type="checkbox"/> Developmental
7	Proximal Focal Femoral deficiency (PFFD)	<input type="checkbox"/> Yes <input type="checkbox"/> No	9	Congenital Pseudo-Arthrosis (CPT)	<input type="checkbox"/> Tibia <input type="checkbox"/> Femur
10	Congenital Knee Dislocation (CDK)	<input type="checkbox"/> Hyperextension <input type="checkbox"/> Flexion	11	Hemimelia	<input type="checkbox"/> Tibia <input type="checkbox"/> Femur
12	Pes Plano Valugus	<input type="checkbox"/> Flexus <input type="checkbox"/> Rigidus	13	Pes Plano Valugus_Rigidus	<input type="checkbox"/> Vertical talus <input type="checkbox"/> Tarsal coalition
14	Arthrogryposis Multiplex Congenita	<input type="checkbox"/> Yes <input type="checkbox"/> No	15	Torticollis	<input type="checkbox"/> Congenital <input type="checkbox"/> Developmental
16	Radial Club Hand	<input type="checkbox"/> Yes <input type="checkbox"/> No	17	Osteogenesis Imperfecta (OGIP)	<input type="checkbox"/> Yes <input type="checkbox"/> No
18	Rickets/Osteomalacia	<input type="checkbox"/> Yes <input type="checkbox"/> No	19	Genu Valgus	<input type="checkbox"/> Yes <input type="checkbox"/> No
20	Genu Varus	<input type="checkbox"/> Yes <input type="checkbox"/> No	21	Scoliosis	<input type="checkbox"/> Yes <input type="checkbox"/> No
22	Other	<input type="checkbox"/> Yes <input type="checkbox"/> No	23	Other, please specify	

# DDH Baseline Form

Average time to enter baseline data : 2 mins



## Paediatric Orthopaedic Registry Pakistan (PORP) DDH-Baseline Form

A. Demographic Data									
1	Registration/MR No				2	Visit Date			
3	Consent: Informed consent taken from parents/ guardian for registry, photographs and publication							<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Patient Name			5	Father Name				
6	DOB		7	Age		8		Gender	
						<input type="checkbox"/> Week <input type="checkbox"/> Month <input type="checkbox"/> Year		<input type="checkbox"/> Male <input type="checkbox"/> Female	
9	Province		10		City		<input type="checkbox"/> Karachi <input type="checkbox"/> Hyderabad <input type="checkbox"/> Sukkur <input type="checkbox"/> Larkana <input type="checkbox"/> Nawabshah <input type="checkbox"/> Mirpurkhas <input type="checkbox"/> Shaikapur <input type="checkbox"/> Jacobabad <input type="checkbox"/> Khairpur <input type="checkbox"/> Lahore <input type="checkbox"/> Faislabad <input type="checkbox"/> Islamabad		
		<input type="checkbox"/> Sindh <input type="checkbox"/> Punjab <input type="checkbox"/> Balochistan <input type="checkbox"/> Khyber Pakhtunkhwa				<input type="checkbox"/> Rawalpindi <input type="checkbox"/> Gujranwala <input type="checkbox"/> Multan <input type="checkbox"/> Bhawalpur <input type="checkbox"/> Sargodha <input type="checkbox"/> Sialkot <input type="checkbox"/> Rahim Yar Khan <input type="checkbox"/> Quetta <input type="checkbox"/> Hub <input type="checkbox"/> Sui <input type="checkbox"/> Der Allah Yar <input type="checkbox"/> Chaman		<input type="checkbox"/> Gwadar <input type="checkbox"/> Peshawar <input type="checkbox"/> Abbottabad <input type="checkbox"/> Mardan <input type="checkbox"/> Nowshera <input type="checkbox"/> Dera Ismail Khan <input type="checkbox"/> Other: _____	
11	Hospital		12	Contact # 1		13	Contact # 2		
14	Parent's NIC #		15	Email ID		16	Assessment done by		
17	Born at		18	Delivery type		19	MSK screening done		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Hospital <input type="checkbox"/> Home				<input type="checkbox"/> Vertex <input type="checkbox"/> Breech			
20	MSK deformity/ dislocation noticed at		21	Associated Deformities		22	Family history of DDH/ Other MSK congenital deformity		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Birth <input type="checkbox"/> 6 months <input type="checkbox"/> 12 months <input type="checkbox"/> 18 months <input type="checkbox"/> 24 months <input type="checkbox"/> More than 24 months				<input type="checkbox"/> Cleft palate <input type="checkbox"/> Cleft lip <input type="checkbox"/> Club foot <input type="checkbox"/> Knee dislocation <input type="checkbox"/> Other			
23	Medications during pregnancy		<input type="checkbox"/> Yes <input type="checkbox"/> No		24	Which medications during pregnancy			
B. DDH Characteristics									
1	Laterality		<input type="checkbox"/> Unilateral <input type="checkbox"/> Bilateral		2	Unilateral		<input type="checkbox"/> Right <input type="checkbox"/> Left	
3	Tonnis Height Dislocation Right		<input type="checkbox"/> T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/> T4		4	Tonnis Height Dislocation Left		<input type="checkbox"/> T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/> T4	
5	Acetabular Index Right		<input type="checkbox"/> Less than 30° <input type="checkbox"/> 30° - 45° <input type="checkbox"/> 45° and above		6	Acetabular Index Left		<input type="checkbox"/> Less than 30° <input type="checkbox"/> 30° - 45° <input type="checkbox"/> 45° and above	

# DDH Baseline Form



7	Double Acetabulum	<input type="checkbox"/> Yes <input type="checkbox"/> No	8	Previous treatment received	<input type="checkbox"/> Yes <input type="checkbox"/> No
8	Previous treatment received if yes	<input type="checkbox"/> Pavlik Harness <input type="checkbox"/> Von Rosen Splint <input type="checkbox"/> Triple Diapers <input type="checkbox"/> Cast <input type="checkbox"/> Surgery	9	Previous treatment Surgery	<input type="checkbox"/> OR + Capsuloraphy <input type="checkbox"/> OR + Pelvic Osteotomy <input type="checkbox"/> OR + Femoral Shortening + Pelvic Osteotomy <input type="checkbox"/> OR + Femoral shortening
10	Post operative wound infection	<input type="checkbox"/> Yes <input type="checkbox"/> No	11	Post operative wound infection type	<input type="checkbox"/> Superficial <input type="checkbox"/> Deep
12	Post operative stiffness	<input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Gross <input type="checkbox"/> Ankylosis	13	Post operative subluxation	<input type="checkbox"/> Yes <input type="checkbox"/> No
14	Post operative dislocation	<input type="checkbox"/> Yes <input type="checkbox"/> No	15	Post operative Avascular Necrosis	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>C. Current Procedure Performed</b>					
1	Surgeon		2	Assistant	
3	Date		4	Procedure	<input type="checkbox"/> Pavlik harness <input type="checkbox"/> Von Rosen Splint <input type="checkbox"/> Triple Diapers <input type="checkbox"/> Cast <input type="checkbox"/> Surgery_OR + Capsuloraphy
5	Procedure Cast	<input type="checkbox"/> Closed Reduction and cast <input type="checkbox"/> Closed Reduction + Adductor Tenotomy and cast <input type="checkbox"/> Trans-fixation K-Wire	6	Procedure Surgery OR + Capsuloraphy Approach	<input type="checkbox"/> Smith Petersen <input type="checkbox"/> Bikini <input type="checkbox"/> Medial <input type="checkbox"/> Other
7	Additional Procedure	<input type="checkbox"/> Osteotomy <input type="checkbox"/> Osteotomy with capsulorraphy <input type="checkbox"/> Capsulorraphy	8	Additional Procedure Osteotomy	<input type="checkbox"/> Femoral Deotation Osteotomy <input type="checkbox"/> Pelvic Osteotomy <input type="checkbox"/> Femoral Shortening + Pelvic Osteotomy <input type="checkbox"/> Femoral Shortening + Derotation Osteotomy
9	Pelvic Osteotomy type	<input type="checkbox"/> Salter <input type="checkbox"/> Pemberton <input type="checkbox"/> Dega <input type="checkbox"/> San Diego <input type="checkbox"/> Chiari <input type="checkbox"/> Triple Rotational <input type="checkbox"/> Other	10		
10	Remarks				

# DDH Follow-up Form

Average time to enter follow-up data : 1 min



## Paediatric Orthopaedic Registry Pakistan (PORP) DDH-Follow-Up Form

**Health  
Research  
Advisory  
Board**  
Developing Health Research Expertise of Pakistan

A. Demographic Data				
1	MR No		2	Follow up Visit Date
3	Patient Name		4	Father Name
5	Hospital		6	Follow-up duration <input type="checkbox"/> 2 weeks <input type="checkbox"/> 3 weeks <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> 12 weeks <input type="checkbox"/> More than 16 weeks
7	Visit recorded by (Dr name)			
B. Observations/ Procedures				
1	Brace compliance <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor		2	Brace weaning <input type="checkbox"/> Yes <input type="checkbox"/> No
3	Brace weaning duration <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> More than 8 weeks		4	Post brace discontinuation outcome <input type="checkbox"/> Retained <input type="checkbox"/> Subluxated <input type="checkbox"/> Dislocated <input type="checkbox"/> Femoral nerve palsy <input type="checkbox"/> AVN
5	Post operative status <input type="checkbox"/> Febrile <input type="checkbox"/> Pain		6	Wound inspection (within 2 weeks) <input type="checkbox"/> Yes <input type="checkbox"/> No
7	Wound inspection side <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both sides		8	Wound type <input type="checkbox"/> Dry <input type="checkbox"/> Superficial infection <input type="checkbox"/> Dehiscence <input type="checkbox"/> Deep seated infection
8	Spica cast <input type="checkbox"/> No cast <input type="checkbox"/> Discontinued <input type="checkbox"/> Changed <input type="checkbox"/> Repaired		9	Spica cast changed <input type="checkbox"/> 2 weeks <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> More than 12 weeks
10	Spica cast repaired <input type="checkbox"/> 2 weeks <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> More than 12 weeks		11	Spica cast discontinuation <input type="checkbox"/> 2 weeks <input type="checkbox"/> 4 weeks <input type="checkbox"/> 6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> More than 12 weeks
12	Spica cast discontinuation reason <input type="checkbox"/> Age <input type="checkbox"/> Infection <input type="checkbox"/> Completion <input type="checkbox"/> Subluxation <input type="checkbox"/> Dislocation			
C. Clinical Outcomes				
1	Clinical outcomes Mackay's clinical evaluation <input type="checkbox"/> Excellent ( Stable painless hip, Negative trendelenburg ,Full ROM ) <input type="checkbox"/> Good (Stable painless hip, Slight limb, Slight decreased ROM) <input type="checkbox"/> Fair (Stable painless hip, Positive trendelenburg , Limited ROM or a complication) <input type="checkbox"/> Poor (Unstable hip, Painful hip, Positive trendelenburg)			
2	Bhatti functional scoring system <input type="checkbox"/> Excellent <input type="checkbox"/> Good			<input type="checkbox"/> Fair <input type="checkbox"/> Poor

# DDH Follow-up Form



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## D. Contained Hip

1	Contained hip (Intact shenton line, Tonnis height {T1, T2}, Acetabular index <30°)	<b>Right</b>	<b>Left</b>	2	Contained Hip duration	<input type="checkbox"/> Weeks <input type="checkbox"/> Months <input type="checkbox"/> Years
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

## E. Radiological outcomes

1	Radiological outcomes	<input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Class IV <input type="checkbox"/> Class V <input type="checkbox"/> Class VI	2	Class I: Normal	<input type="checkbox"/> Class Ia <input type="checkbox"/> Class Ib
3	Class Ia	<input type="checkbox"/> CE >19° (6-13 years) <input type="checkbox"/> CE >25° (14 & above years age)	4	Class Ib	<input type="checkbox"/> CE >15°-19° (6-13 years) <input type="checkbox"/> CE >20°-25° (14 & above years age)
5	Class II: Moderate deformity of head, femoral neck or Acetabulum	<input type="checkbox"/> Class Ia <input type="checkbox"/> Class Ib	6	Class IIa	<input type="checkbox"/> CE >19° (6-13 years) <input type="checkbox"/> CE >25° (14 & above years age)
7	Class IIb	<input type="checkbox"/> CE >15°-19° (6-13 years) <input type="checkbox"/> CE >20°-25° (14 & above years age)	8	Class III: Dysplasia without Subluxation	<input type="checkbox"/> CE <15° (6-13 years) <input type="checkbox"/> CE < 20° (14 & above years age)
9	Class IV	<input type="checkbox"/> CE +/- 0° (Moderate Subluxation) <input type="checkbox"/> CE < 0° (Severe Subluxation)	10	Class V: Femoral head articulates with pseudo acetabulum	<input type="checkbox"/> Yes <input type="checkbox"/> No
11	Class VI: Resdislocation	<input type="checkbox"/> Yes <input type="checkbox"/> No			

## F. Complications

1	Complications seen	<input type="checkbox"/> Yes <input type="checkbox"/> No	2	Complication seen at	<input type="checkbox"/> Weeks <input type="checkbox"/> Months <input type="checkbox"/> Years
3	Subluxation	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both sides	4	Dislocation	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both sides
5	AVN	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both sides	6	Infection (Deep)	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both sides
7	Stiffness	<input type="checkbox"/> Yes <input type="checkbox"/> No	8	Ankylosis	<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Shortening/ Lengthening (in cms)	<input type="checkbox"/> Yes <input type="checkbox"/> No	10	Premature Capital Physeal Fusion	<input type="checkbox"/> Yes <input type="checkbox"/> No
11	Neuro Deficit	<input type="checkbox"/> Yes <input type="checkbox"/> No	12	Neuro Deficit Type	<input type="checkbox"/> Femoral nerve <input type="checkbox"/> Sciatic nerve

## G. Post Complication Treatment

1	Treatment given	<input type="checkbox"/> Conservative <input type="checkbox"/> Redo surgery	2	Conservative treatment	<input type="checkbox"/> Abduction splint <input type="checkbox"/> Reassurance and mobilization
2	Redo Surgery	<input type="checkbox"/> OR + Capsuloraphy <input type="checkbox"/> OR + Pelvic Osteotomy	3	Pelvic Osteotomy type	<input type="checkbox"/> Salter <input type="checkbox"/> Pemberton <input type="checkbox"/> Dega



# DDH Follow-up Form



		<input type="checkbox"/> OR + Femoral Shortening + Pelvic Osteotomy <input type="checkbox"/> OR + Femoral shortening			<input type="checkbox"/> San Diego <input type="checkbox"/> Chiari <input type="checkbox"/> Other
<b>H. Redo Treatment Outcomes</b>					
1	Mackay's clinical score	<input type="checkbox"/> Excellent (Stable painless hip, Negative trendelenburg ,Full ROM) <input type="checkbox"/> Good (Stable painless hip, Slight limb, Slight decreased ROM) <input type="checkbox"/> Fair (Stable painless hip, Positive trendelenburg , Limited ROM or a complication) <input type="checkbox"/> Poor (Unstable hip, Painful hip, Positive trendelenburg)			
2	Bhatti functional scoring system	3	Severin's Score	<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	
3	Contained	4	Subluxated	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Infection	6	Infection type	<input type="checkbox"/> Superficial <input type="checkbox"/> Deep	
7	Stiffness	8	AVN type	<input type="checkbox"/> Salter I <input type="checkbox"/> Salter II <input type="checkbox"/> Salter III	
<b>I. Photograph</b>					
1	Upload Photograph	2	Preoperative Anteroposterior		
3	Preoperative Lateral	3	Postoperative Anteroposterior		
4	Postoperative Lateral				
5	Remarks				

## Stakeholders

### Paediatric Orthopaedic Society Pakistan

Paediatric Orthopedic Society of Pakistan (POSP), is a registered non-profit Society (KAR NO. 053 of 2019-20 under Societies Act XXI of 1860) of Paediatric Orthopedic Surgeons of Pakistan, who are committed to providing quality care for children with musculoskeletal deformities through research, education, training, and advocacy.



### Aims & Objectives

- To encourage, cultivate, propagate and popularize science of pediatric Orthopedics
- The advancement of pediatric orthopaedic surgery in pakistan.
- The enhancement of care for children with musculoskeletal problems.
- To develop and encourage the teaching, research and education of pediatric orthopedics.
- To train professional across of country by providing opportunities & learn the latest evidence based scientific knowledge in the field of pediatric orthopedics by conducting annual/biennial conference, symposia, course, workshops & continuing educational program.

# Stakeholders

## Health Research Advisory Board

Health Research Advisory Board (HealthRAB) a registered society. It is a “think tank” of senior clinicians, researchers & academicians who are committed to the mission of HealthRAB which is to “Developing Health Research Ecosystem”


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*Developing Health Research Ecosystem*


### Vision:

Improving health globally by developing a relevant & efficient research ecosystem

### Leadership:




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Liaquat National Hospital  
President,  
Pakistan Arthroplasty Society

### Projects:

National Disease Registries

Research Funds

International Medical Research Conference (IMRC)

Research Webinars

Research Awards

National Health Research Award

Capacity Building Workshops

Student Chapters

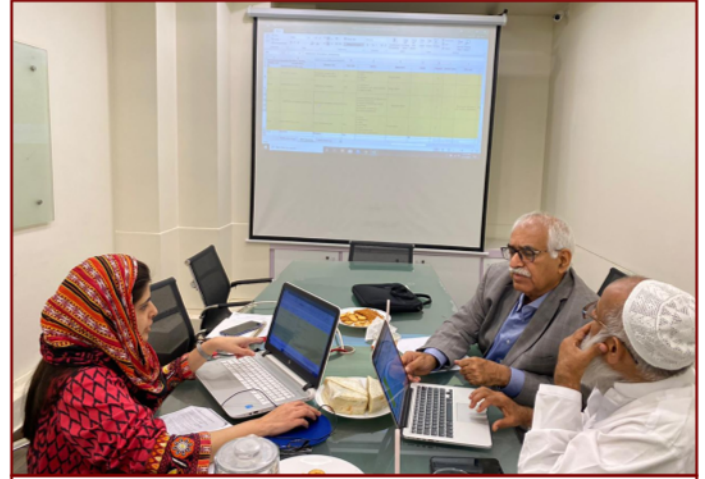
National Research Policy Document

Research Reference Guide

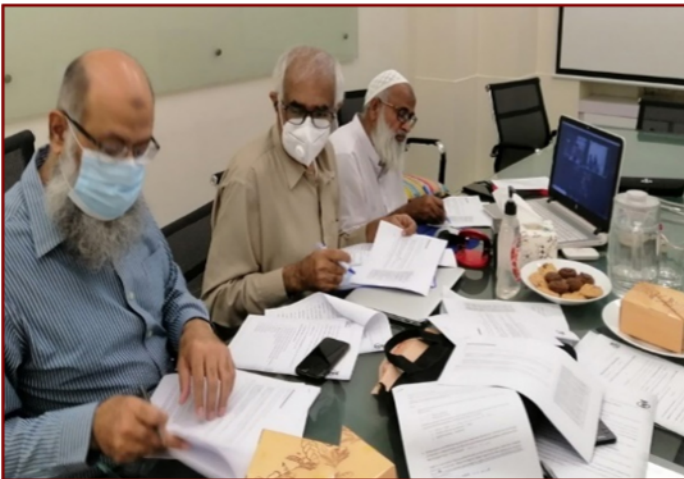
## PORP Meetings



Core Committee | 26 November 2019



Core Committee | 1 January 2020



Core Committee | 12 March 2020



Steering Committee | 15 June 2020



Steering Committee | 14 July 2020



Steering Committee | 18 August 2020

# PORP Meetings



Core Committee | 24 March 2021



PORP Launch | 1 October 2021



Core Committee | 1 September 2022



Core Committee | 20 September 2022



PORP Inauguration | 6 July 2021



# Acknowledgements



**Health  
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Research Support  
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# **Born with Deformity! Why to live with Disability**

Prof. Dr. Anisuddin Bhatti