



# Autosomal Recessive Polycystic Kidney Disease and Epidemiologic Factors

Nakysa Hooman<sup>1,2,\*</sup>

<sup>1</sup>Consultant Pediatric Nephrology, Ali-Asghar Children Hospital, Iran University of Medical Sciences, Tehran, Iran

<sup>2</sup>General Secretary of Iranian Society of Pediatric Nephrology, Tehran, Iran

\*Corresponding author: Nakysa Hooman, Professor, Department Pediatric Nephrology, Ali-Asghar Children Hospital, Iran University of Medical Sciences, Tehran, Iran. Tel: +98-2123046210, E-mail: hooman.n@iums.ac.ir

Received 2017 April 24; Accepted 2017 July 25.

Keywords: ARPKD, Epidemiologic Factors, Children, Renal Cyst

## Dear Editor,

I read with interest the article of Dr Yousfichayjan et al. about “autosomal recessive polycystic kidney disease and epidemiologic factors” (1). The author reported on sixty children with diagnosis of autosomal recessive polycystic kidney disease (ARPKD) from the province of Arak. The number was surprisingly high compared to ADPKD that is the most common inherited disease. The ARPKD is a very rare disease with high morbidity and mortality and wide variation in clinical presentation.

Our previous nationwide registry on CAPD children revealed that 8.3% of children had polycystic kidney disease without determining the subtypes (2). In a retrospective study by Ataie et al., 1.8% of CKD children had infantile polycystic kidney disease during 23 years of observation (3). Another nationwide survey by IranSPN members revealed that 229 (7.75%) out of 2940 patients had PKD without categorizing the type of inheritance (4).

Considering the total population of Iranian children under 15 years, the overall estimated incidence of PKD would be approximately 1.63 cases per 100000 individuals. It was interesting that in a small province of Arak with total population of 1413959 (5), the incidence of APKD alone would be estimated as 21.21 cases per 100000 individuals in children younger than 15 years.

Personally, I am very interested in receiving more information about the following missed data in this original article; the time period of data collection, prenatal history, the basic clinical findings, ultra sound report of abdomen and kidney, the result of renal or liver biopsy, the consanguinity state of parents, the numbers of affected siblings, and the final outcome.

As a collaborator of Arepkd.org (6) and consider-

ing that I hold registration and ethic code number IR.IUMS.REC 1395.95-02-30-28859 from Iran University of Medical Sciences for genetic study of ARPKD patients, I am ready to collect samples to perform a genetic study free of charge on affected patients and families. I would welcome further genetic studies on these patients if the author is able to obtain permission from the family.

## References

1. Yousefichaijan P, Maghsudlu F, Rafiei M. Autosomal recessive polycystic kidney disease and epidemiologic factors. *J Compr Ped.* 2017;**8**(1).
2. Hooman N, Esfahani ST, Mohkam M, Derakhshan A, Gheissari A, Vazirian S, et al. The outcome of Iranian children on continuous ambulatory peritoneal dialysis: the first report of Iranian National Registry. *Arch Iran Med.* 2009;**12**(1):24-8. [PubMed: 1911025].
3. Ataie N, Hosseini M, Beikpour M, Ataie F, Bloori Jirandeh H, Bazargani B, et al. Etiology and outcome of chronic kidney disease in Iranian children. *Int J Pediatr.* 2016;**4**(7):2105-12.
4. Hooman N, Derakhshan A, Javadijarjani F, Mortazavi F, Falakflaki B, Sadeghi-Bojd S, et al. The etiology of tubulopathy in Iranian children-Iranian society of pediatric nephrology collaboration. The 3rd International congress of Iranian Society of Pediatric Nephrology. *J Ped. Nephrology*; 2013. pp. 1-2.
5. Small province of Arak with total population Available from: <https://www.amar.org.ir>.
6. Ebner K, Schaefer F, Liebau MC, A. RegPKD Consortium . Recent Progress of the ARegPKD Registry Study on Autosomal Recessive Polycystic Kidney Disease. *Front Pediatr.* 2017;**5**:18. doi: 10.3389/fped.2017.00018. [PubMed: 28296980].