

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Spinal Deformities in Preschool Children.

Larisa Alagić- Džambić^{1*}, Emir Alagić², Aida Kemez- Alagić², and Mirsad Džambić³

¹Development and Registration Department, Bosnalijek d.d., Jukićeva 53, 71000 Sarajevo, B&H

²Public Health Institution, Branilaca 22, 71300 Visoko, B&H

³Federal Administrations for Inspection Affairs, Fehima Efendije Čurčića 6, 71000 Sarajevo, B&H

ABSTRACT

Systematic examinations of children enrolled in school are mandatory and focused on assessing the physical and mental condition of the child, timely detection of vision disorders, strabismus, hearing impairment and speech development, orthopedic anomalies detection and tooth condition assessment (caries and orthodontic anomalies) as well as noticing any other child's health disorder. A child with a perceived anomaly is advised by a pediatrician to consult a specialist specialist (ophthalmologist, physiatrist, orthopedist, laboratory and other diagnostic, etc.). This study was conducted in period from 2016 - 2018 with the aim to present the results for spinal deformities in preschool children.

Keywords: Spinal Deformities, pigeon chest, lowered feet, preschool children

**Corresponding author*

INTRODUCTION

First systematic review is one that is carried out before enrolling children in the first grade of elementary school. In addition to examining the assessment of physical health of a child, a test is also performed to evaluate his / her psychic abilities (1). If there are disorders that may disrupt normal attendance, the child is sent to further processing, after which the appropriate form of schooling is determined. The system overview includes measurement of body weight and height, based on which is given a rating of nutrition; Snellen's charts determine the sharpness of the vision and examine the recognition of basic colors; the back and foot, the thyroid gland, the mouth cavity with the tooth, the heart and the lungs are examined (2). By examining the girls 'and boys' sexes, and the breasts in the girl, sexual maturity is determined. In some country, levels of hemoglobin in blood and analysis urine are also included. This study was conducted in period from 2016 - 2018 with the aim to present the results for spinal deformities in preschool children, with a look at scoliosis, poor posture, chest wall deformities and foot deformities (3, 4, 5).

METHODS

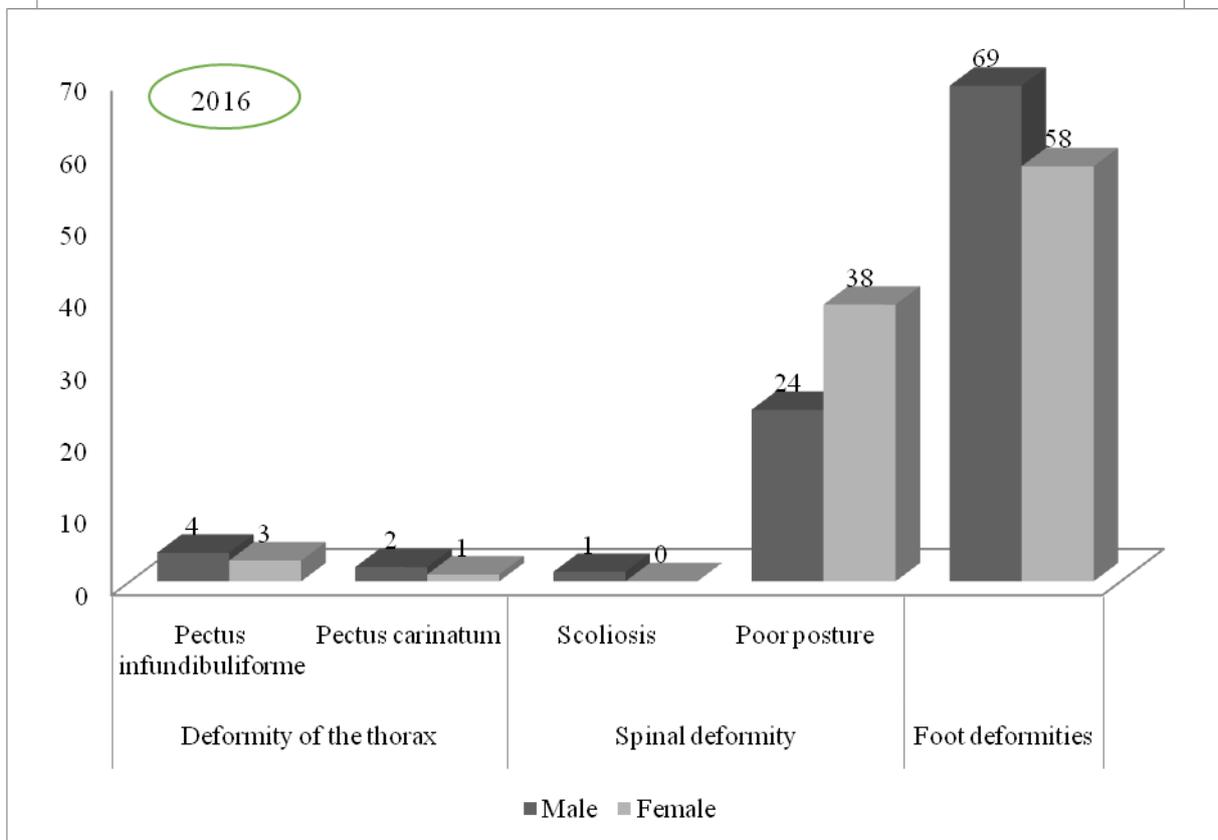
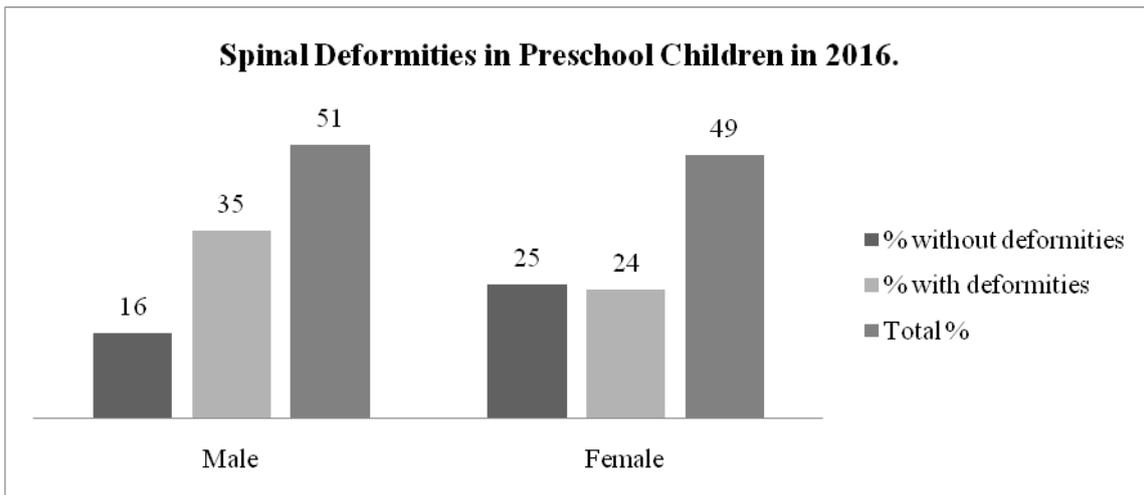
In the ambulance for physiatrist medicine and rehabilitation, as a systematic review of preschool children in period from 2016 - 2018 has been reviewed 1223 children, at age 6 to 7 years. The goals of this paper are to see the percentage of children having poor posture, chest wall deformities and foot deformities, so we can prevent, treat you and save health care and most importantly, to prevent pain and improper holding your body and starting to involve parents, pediatricians, nursery educators by schools for the benefit of children and the whole society.

RESULTS

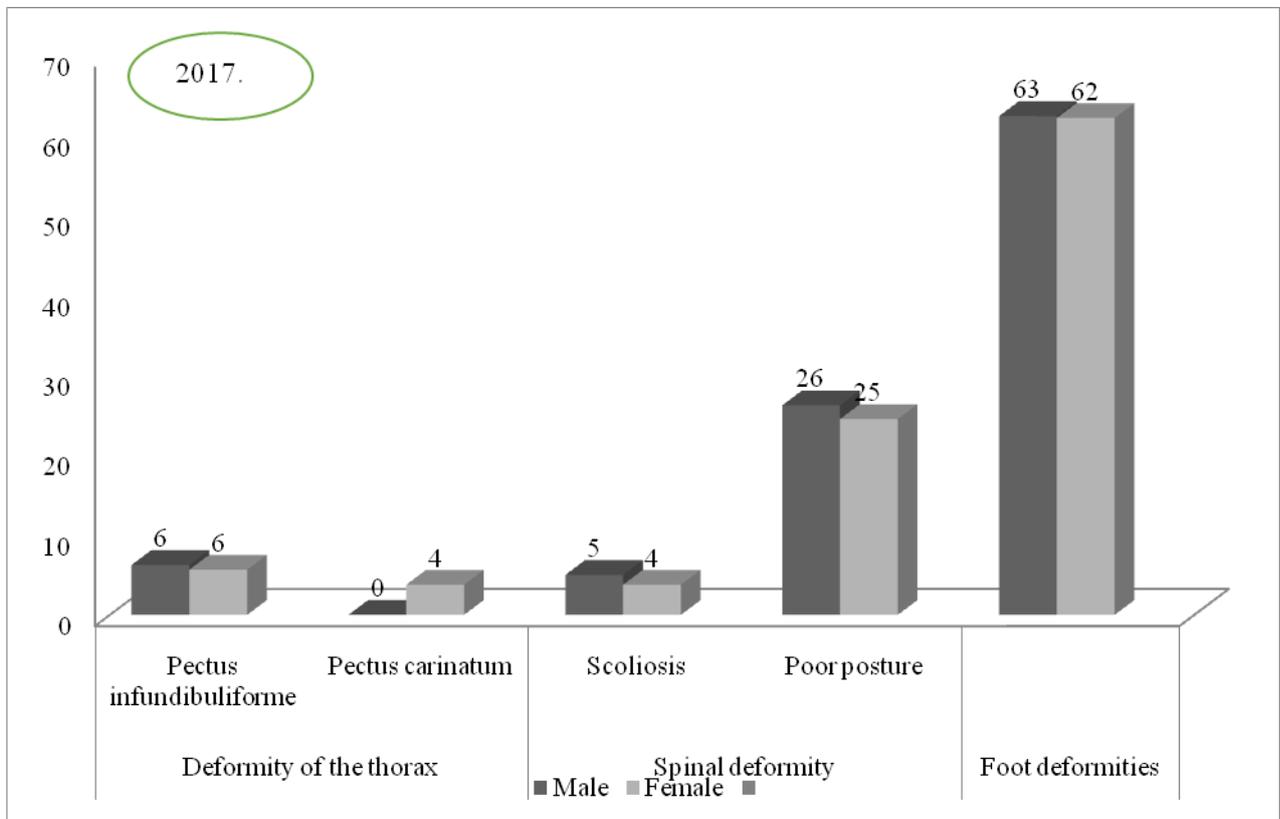
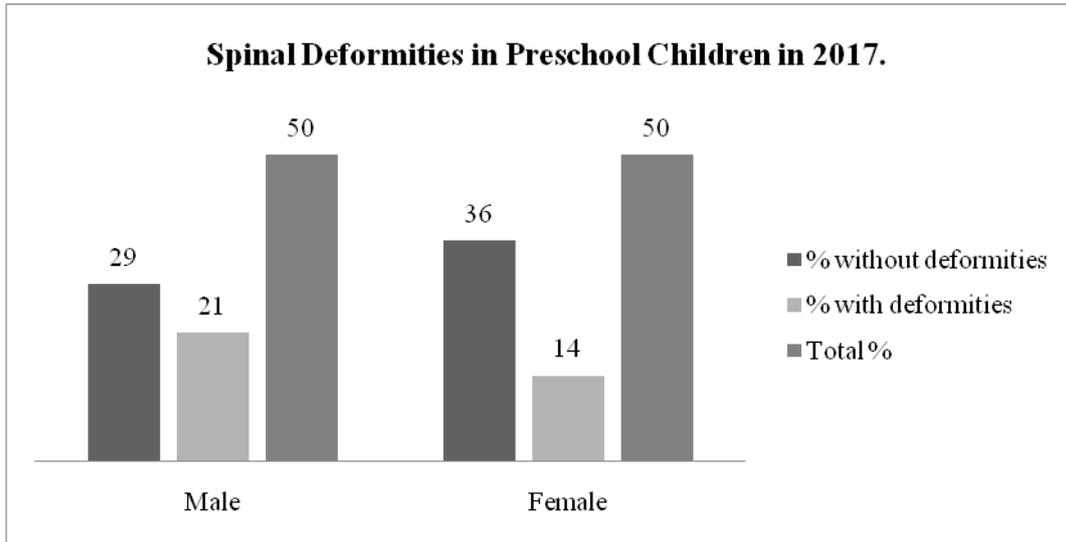
In 2016., has been reviewed 432, in 2017. 385 and in 2018. 406 children. The statistical evaluation is in the following table and graphics:

Number of recorded deformities male / female per year		2016.		2017.		2018.	
		Male	Female	Male	Female	Male	Female
Deformity of the thorax	Pectus infundibuliforme	6	3	5	3	7	0
	Pectus carinatum	3	1	0	2	1	2
Spinal deformity	Scoliosis	2	0	4	2	0	0
	Poor posture	36	40	21	13	20	10
Foot deformities		104	60	50	33	73	33

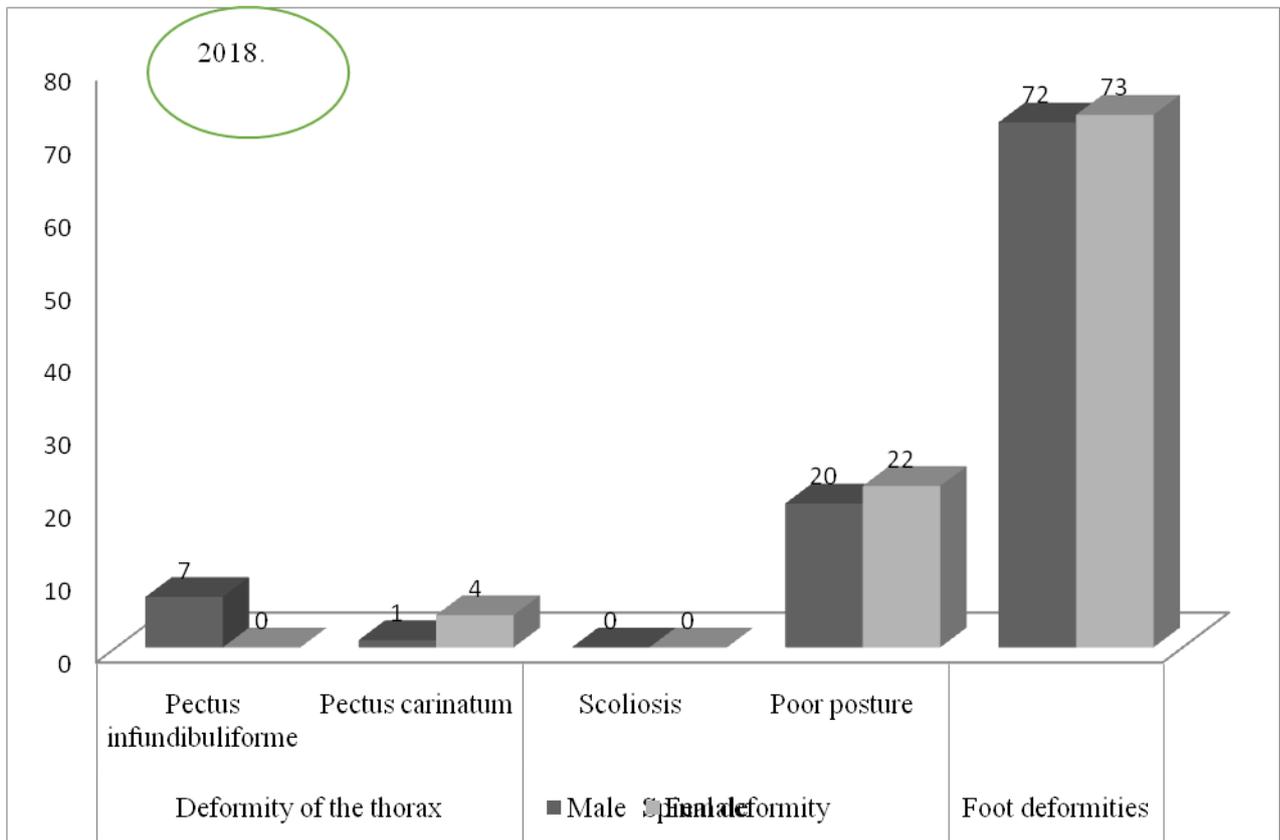
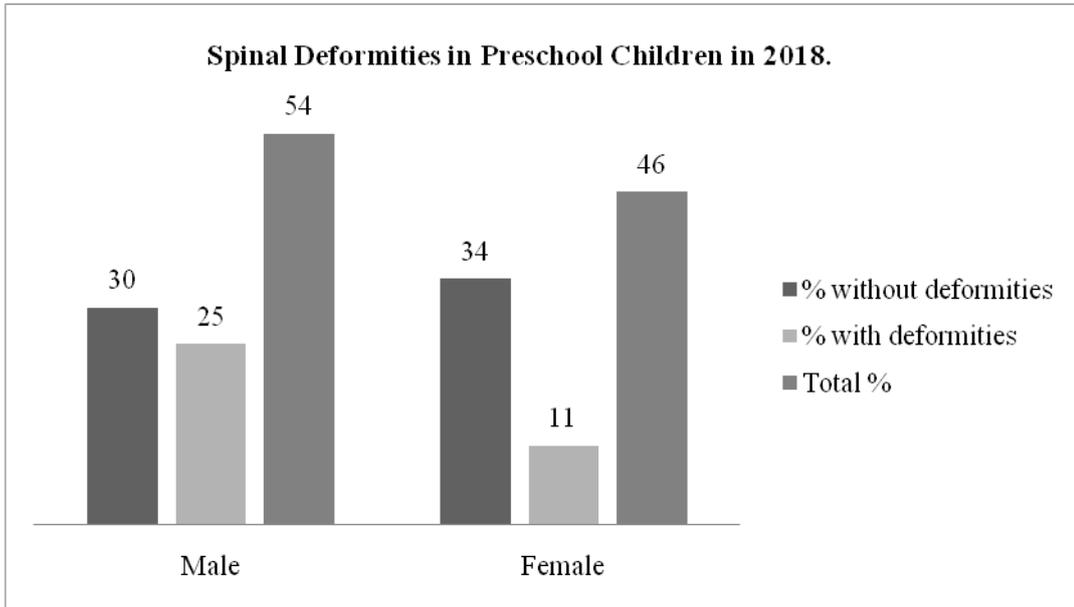
As we see from table results and graphic results, in 2016., 16% of male preschool children are without deformities, in the case of female are 25%. Therefore, 35% male is with deformities and 24% female. If we look further at individual deformities, for both genders, foot deformities are presented is most prominent (69% male, 68% female). Then we have spinal deformity with large percentage for poor posture (24% male, 38% female). The rest classification deformities are less than 5% for both genders.



In 2017., 29% of male preschool children are without deformities, in the case of female are 36%. Therefore, 21% male is with deformities and 14% female. Also, foot deformities are presented is most prominent (63% male, 62% female). Spinal deformity, poor posture with 26% male, 25% female, is second one. The rest classification deformities are less than 6% for both genders.



In 2018, 30% of male preschool children are without deformities, in the case of female are 34%. Therefore, 25% male is with deformities and 11% female. Also, foot deformities are presented as most prominent (72% male, 73% female). Spinal deformity, poor posture with 20% male, 22% female, is second one. The rest classification deformities are less than 5% for female, and in this year we have the rise of deformity of the thorax (pectus infundibuliforme) for male preschool children.



CONCLUSION

From the above results, we can see that there is a statistical drop in the number of spin deformities in preschool children in period from 2016 – 2018. The main deformity is foot deformities for both genders. The second problem is spinal deformity, classed as poor posture. Today instead a boulder walking on uneven terrains, rocky and at home, from small feet to children they start walking in walkers dressed in soft slippers instead of hard shoes, instead of climbing on the wood, we have movable stairs and a lift, a children instead of playing sports, watching television etc. This paper is real picture and we recommend that as soon as possible to be treated. Children and parents should be included in medical education in schools through exercises and games.



REFERENCES

- [1] Desmarais TJ, Keller MS (2013). "Pectus carinatum". *Current Opinion in Pediatrics (Review)*. 25 (3): 375–81
- [2] Del Frari B, Sigl S, Schwabegger AH (2016). "Complications Related to Pectus Carinatum Correction: Lessons Learned from 15 Years' Experience. Management and Literature Review". *Plastic and Reconstructive Surgery (Review)*. 138 (2): 317e–29e
- [3] Robicsek F, Watts LT, Fokin AA. Surgical repair of pectus excavatum and carinatum. *Semin Thorac Cardiovasc Surg* 2009;21:64-75.
- [4] Brichon PY, Wihlm JM. Correction of a severe pouter pigeon breast by triple sternal osteotomy with a novel titanium rib bridge fixation. *Ann Thorac Surg* 2010;90:e97-9.
- [5] Kuzmichev V, Ershova K, Adamyan R. Surgical correction of pectus arcuatum. *Asvide* 2016;3:166. Available online: <http://www.asvide.com/articles/914>