

**Supplementary Table 2. Summary of previous studies of chronic constipation in children from neighboring countries and worldwide**

Country	Study	No.	Sex	Age (yr)	Constipation type	Rome criteria	Main symptom (%)	Main clinical finding (%)	Two main organic causes (%)
Bahrain <sup>a)</sup>	Isa et al, 2022	616	M>F	2.3–9.2	Both	IV	Hard stool (92.2)	Abdominal distension (9.1)	CMPA (5.7), CP (4.4)
UAE	Khalil <sup>4)</sup> 2015	187	F>M	4–13	FC	NR	NR	NR	NA
Iran	Talachian et al. <sup>17)</sup> 2009	556	F>M	36 Days–15	Both	NR	NR	NR	Anal stenosis (6.9), Hirschsprung's disease (3.4)
Iran	Dehghani et al. <sup>8)</sup> 2015	222	F>M	1–18	FC	III	Large, hard stool (93.7)	Fecal rectal mass (59.9)	NA
Iran	Haghighat et al. <sup>24)</sup> 2018	1000	F>M	6 mo–18	Both	III	Large diameter Stool (62.8)	Fecal rectal Mass (66.8)	CP (38.4), Down syndrome (30.8)
Jordan	Altamimi <sup>9)</sup> 2014	528	M>F	0–18	Both	II	Hard, dried, painful stool (92.9)	Fecal rectal mass (50)	Surgical etiologies, celiac disease
Turkey	Kocaay et al. <sup>11)</sup> 2011	1018	M>F	0–6	Both	Not used	Discomfort with defecation (33)	Fecal abdominal mass (33.3)	Anterior-positioned anus (2.1), Hirschsprung disease (2.1)
Turkey	Appak et al. <sup>11)</sup> 2017	63	M>F	4–18	FC	III	Painful defecation (96.9)	Fecal rectal mass (93.8)	NA
Sudan	Ali et al. <sup>13)</sup> 2012	150	M>F	0–16	Both	NR	Straining (43)	Fecal impaction (59.4)	Hirschsprung's disease (8), hypothyroidism & celiac disease (1.2)
India	Madhu et al. <sup>12)</sup> 2015	336	F>M	4–14	FC	III	NR	NR	NA
India	Bansal et al. <sup>3)</sup> 2016	156	M>F	0–18	Both	III	Hard, dried, painful stool (85.3)	Fecal rectal mass (52.56)	Hirschsprung's disease (6.4), CP & spina bifida (1.9)
India	Kondapalli and Gullapalli <sup>9)</sup> 2018	654	F>M	2–12	FC	III	Withholding behavior (58.4)	NR	NA
China	Ip et al. <sup>7)</sup> 2005	778	F>M	3–5	NR	II	NR	NR	NR
China	Ma et al. <sup>23)</sup> 2018	164	M>F	5–15	FC	III	NR	NR	NA
Japan	Fujitani et al. <sup>2)</sup> 2018	3595	M>F	3–8	FC	III	Withholding behavior (73.6)	NR	NA
Korea	Park et al. <sup>25)</sup> 2016	217	M>F	2–7	FC	III	Hard painful stool (55.6)	Fecal rectal mass (44.5)	NA
Italy	Turco et al. <sup>15)</sup> 2014	465	F>M	3–12 mo	FC	III	NR	NR	NA
UK <sup>5)</sup>	Joinson et al. <sup>16)</sup> 2018	10,450	M>F	4–10	Both	NR	NR	NR	NR
USA <sup>1)</sup>	Sinha et al. <sup>28)</sup> 2018	188	F>M	0–21	FC	III	NR	NR	NA

CMPA, cow's milk protein allergy; NR, no record; NA, not applicable; FC, functional constipation; CP, cerebral palsy.

<sup>a)</sup>The present study.