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| **Community population** |  |  |  |  | |  | |  | |  | |  | | |  | |
| Chung  (2010)  Republic of Korea | Cross-sectional  8219 | 5-13 | **≥1 criterion**  \*Frequency < 3 p/w,  \*BSS type 1 or 2,  \*FI,  \*Difficult or painful defecation | Questionnaire | | DVSS, NUI, increased frequency, Urgency, UI, Holding maneuver | | Questionnaire | | n.a. | | Invitation of parents in 26 Kindergarten and 27 elementary school | | | 2006 | |
| Esezobor  (2015)  Nigeria | Cross-sectional  58 | 5-17 | Rome III criteria with the exception of the duration of bowel symptoms criterion | Questionnaire documented by interviewer | | UI | | Questionnaire | | n.a. | | Invitation of parents in per-urban, largely residential community bordering a public tertiary hospital, in mushin local goverment area of lagos state Nigeria. | | | 2014 | |
| Hamed  (2017)  Egypt | Cross-sectional  778 | 6-12 | ? | Questionnaire | | NUI | | Questionnaire | | n.a. | | Invitation of (parents of) primary school children of 12 primary schools | | | ? | |
| Kajiwara (2004)  Japan | Cross-sectional  977 | 7-12 | Def < 3 p/w | Questionnaire | | DUI | | Questionnaire | | n.a. | | Invitation of parents in 11 primary schools | | | 2002 | |
| Kajiwara (2006)  Japan | Cross-sectional  202 | 13-15 | Def < 3 p/w | Questionnaire | | OAB | | Questionnaire | | n.a. | | Invitation of students in Junior high school | | | 2001 | |
| Kalo  (1996)  Saudi Arabia | Cross- sectional  80 | 6-16 | FC and encopresis | Questionnaire | | UI | | Questionnaire | | n.a. | | Invitation of parents in primary school | | | ? | |
| Sampaio  (2016)  Brasil | Cross- sectional  91 | 5-17 | Rome III criteria | Rome III questionnaire for children | | DVSS,  Frequency, NUI, Urgency, straining, dysuria, holding maneuvers | | DVSS questionnaire | | n.a. | | Invitation of children from 2 Brazilian cities who happened to pass by the collection points | | | 2015 | |
| Sarici  (2016)  Turkey | Cross- sectional  182 | 6-13 | Def < 3 p/w and presence of straining during defecation | Questionnaire | | NUI | | Questionnaire | | n.a. | | Invitation of children from 10 randomly selected primary schools | | | 2013 | |
| **Community population** |  |  |  |  | |  | |  | |  | |  | | |  | |
| Söderstrom (2004)  Sweden | Cross-sectional  113 | 7-11 | FI | Questionnaire | | DUI | | Questionnaire | | n.a. | | Invitation of parents in primary school (first and fourth grade) | | | 1997 | |
| Uguralp (2003)  Turkey | Cross-sectional  171 | 5-9 | **≥1 criterion**  \*Def <1 p/d,  \*Painful  \*Hard  \*Unusually large  \* Difficult to pass stool | | Questionnaire | | UI | | Questionnaire | | n.a. | | Invitation of parents in elementary schools (with kindergarten or preparatory classes) | ? | |
| **Primary care** |  |  |  | |  | |  | |  | |  | |  |  | |
| Loening-Baucke (2007)  United States | Review case records  87 | 5-17 | **≥2 criteria**  \*Def <3 p/w  \*Fi ≥1 p/w  \*Large stools in the rectum or felt on abdominal examination  \*Passing of stools so large that they obstruct the toilet  \*Retentive posturing \*Painful defecation | | Diagnosis by physician | | DUI, NUI, UI | | Diagnosis by physician | | n.a. | | Medical records | 2004 | |
| **Specialist care** |  |  |  | |  | |  | |  | |  | |  |  | |
| McDonald (2004)  Scotland | Review case records  30 | 2-15 | Encopresis: passage of normal stool in abnormal places, Constipation: simple constipation and/or overflow soiling | | Diagnosis by physician | | UI | | Diagnosis by physician | | n.a. | | Medical records  (Referred children with soiling stated as main problem in referral letter) | 4 month period | |
| Reich  (2010)  Poland | Cohort  126 | 0.13 - 18.3 | Rome III criteria | | Questionnaire (documented physician) | | n.a. | | n.a. | | ≥ 10^5 bacteria  Urine culture | | Children admitted to 2nd Department of Pediatrics, Gastroenterology  and Nutrition | 2006 -2008 | |

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| **Specialist care** |  |  |  |  |  |  |  |  |  |
| van Engelenburgvvan Lonkhuyzen (2016)  The Netherlands | RCT    53 | 5-16 | Rome III criteria | Diagnosis by physician | DUI, NUI | Diagnosis by physician | ?  ? | Referred children to pediatric outpatient department | 2009 - 2014 |
| Clavero  (1993)  Spanje | Review case records  65 | 4.3 – 14.7 | Secundaire encopresis according DSM III-R criteria | Diagnosis by physician | NUI | Diagnosis by physician | n.a. | Medical records | ? |
| Dehghani (2013)  Iran | Cross-sectional  120 | Mean age (SD)  7.4 (3.2) | Rome III criteria | Questionnaire  (documented by researcher) | DUI, NUI, Dysuria, dribbling, increased frequency | Questionnaire  (documented by researcher) | Positive urine culture  Leukocytes  >5-6/ high powerfield  Urine analysis and urine culture | Referred children for chronic constipation (≥ 3 months) | ? |
| Foreman (1996)  United Kingdom | Review case records  63 | Mean age (SD)  8.4 (2.8) | Encopresis according ICD-9 criteria | Medical record | UI | Medical record | n.a. | Medical records  (Referred children with encopresis) | 1980 – 1988 |
| Hadjizadeh (2009)  Iran | Prospective case-control  85 | Mean age (SD)  5.7 (2.7) | **≥2 criteria ≥ 2 weeks:**  \*Infrequent passage of stools  \*Difficulty passing stools  \* Feces that are large and hard or in small pieces  \*Abdominal pain  \*Palpable stool in the abdomen  \*Stool in the rectal vault | Diagnose by physician | DVSS, NUI | Modified version of the DVSS questionnaire | ?  Urine analysis and culture | Referred children for FC | 2004 –2005 |
| Imanzadeh (2013)  Iran | Cross- Sectional  480 | 5-15 | **≥1 criterion**  \*Def <3 p/w  \*Hard defecation | ? | UI | ? | n.a. | Children with FC or UI | ? |

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| **Specialist care** |  |  |  |  |  |  |  | |  |  | | |
| Karakelleoglu (1997)  Turkey | Prospective case-control for FC  31 | 4-14 (bladder symptoms)  2-14 (UTI) | **All criteria**  \*Def < 3 p/w  \*Abnormal stools  \*Very large amount of stools present in the rectal ampulla | ? | NUI | ? | Midstream urine:10^5 bacteria /mL  Catheter >50x 10^5 bacteria/mL  Urine analysis and culture | | Children with chronic FC (≥ 6 months) with or without encopresis | ? | | |
| Kasirga  (2006)  Turkey | Prospective case-control for FC  38 | 0.5 – 16  (Children have to be toilet trained to assess bladder symptoms) | **Both criteria**  \*Def < 3 p/w  \*Painful or hard defecation | Diagnosis by physician | NUI, Urge UI, urgency | Diagnosis by physician | ?  Urine analysis and culture | Children with chronic FC (≥ 6 months) | | | ? |
| Loening-Baucke  (1997)  United States | Cohort  234 | 5-18 | \* All children had stool retention  \* 45% had a fecal mass palpable  \* All children had FI | Diagnosis by physician | DUI, NUI | Diagnosis by physician | Midstream urine: ≥ 50.000 bacteria /mL  Catheter ≥10.000 bacteria/mL  Urine analysis and culture | Children with chronic FC (≥ 6 months) and FI ≥1 p/w | | | 1986 – 1988 and 1991 – 1995 |
| van Dijk (2010)  The Netherlands | RCT  133 | 4-18 | **≥2 criteria**  \*Def <3 p/w  \*Fi ≥ 2 p/w  \*Passage of large amounts of stool  \*Palpable abdominal or rectal fecal mass | Questionnaire  (documented by researcher) | DUI, NUI | Questionnaire  (documented by researcher) | n.a. | Referred children | | | 2002 – 2004 |
| Abbreviations: y, year; n.a., not applicable; FC, functional constipation; UTI, urinary tract infection; BSS, Bristol stool scale; FI, fecal incontinence; def, defecation frequency; DVSS, dysfunctional voiding symptom score; DUI, daytime urinary incontinence; NUI nighttime urinary incontinence; UI, urinary incontinence not otherwise specified; OAB, overactive bladder. | | | | | | | | | | | |