RECALLED AND RECORDED BOWEL HABITS CONFIRM EARLY ONSET AND HIGH FREQUENCY OF CONSTIPATION IN DAY-CARE NURSERY CHILDREN

Hilton Coimbra **BORGO**[1] and Helga Verena Leoni **MAFFEI**[2]

ABSTRACT – ***Context*** - Mothers recall early-onset constipation in children attending gastroenterology clinics. ***Objectives*** - To study the bowel habit of young children in the community to determine, first, whether early-onset constipation is confirmed in this setting and, second, the agreement between recalled and recorded bowel habit. ***Methods*** - Defecation data of 57 children aged 6.0-40.7 mo were obtained by maternal recall (questionnaire on predominant stool characteristics) and by record (1,934 defecations registered prospectively at home and in the nursery). The bowel habit was classified according to stool frequency and proportion of stool characteristics (soft, hard and/or runny). Two criteria were used to classify recorded data, since the cutoff point for hard stools to identify constipation is undefined in children: predominant criterion and adult criterion, respectively with >50% and ≥25% of stools with altered consistency. Bowel habit categories were: adequate, constipation, functional diarrhea and "other bowel habit". Nonparametric statistics, and the Kappa index for agreement between recalled and recorded bowel habit, were used. ***Results*** - Constipation occurred in 17.5%, 10.5%, 19.3% of the children by recall, the predominant and the adult criteria, respectively. Constipation was the main recalled alteration, vs 12.3% "other bowel habit". Only one child classified as having functional diarrhea (by the adult criterion). Agreement between recalled and recorded bowel habit was fair for constipation, by the predominant and the adult criteria (K = 0.28 and 0.24, respectively), but only slight (K ≤0.16) for other bowel habit categories. Individual data, however, pointed to a better relationship between recalled constipation and the adult rather than the predominant criterion. ***Conclusions*** - Frequent early-onset constipation was confirmed. Fair agreement between recalled and recorded constipation by the two used criteria indicates that recalled data are quite reliable to detect constipation.

HEADINGS – Constipation. Defecation. Nurseries. Child day care centers. Child.

INTRODUCTION

Mothers of children seen for functional constipation at gastroenterology clinics often recall early onset of their child's symptoms[1, 3, 11, 15, 20, 21, 24, 31, 35], and in Botucatu Medical School pediatric gastroenterology outpatient unit a long time gap was observed between the recalled onset of symptoms and first attendance, respectively at median 3 and 53 months of age[18]. But, data may be biased by the reliability of maternal recall after a long time lapse and by referral of the most severe cases. More reliable information concerning early onset of constipation could be obtained in community studies, but prevalence surveys including infants/young children or specifically addressing them are scarce and, besides, some were performed in primary health clinics: these surveys[2, 5, 12, 16, 22] detected high prevalence of constipation in Brazil (18%-26.8%) and in Canada (16%), but only 4.5% in USA. In other studies, young children's bowel habit (BH) was recalled[25, 38] or recorded[23, 37], but the prevalence of constipation or diarrhea was not reported, since frequency and characteristics of stools are used for classification of the BH[9, 18, 27, 28], and these studies considered defecation frequency apart from hard or runny stool occurrence.

Also, the minimum percentage of hard stools for characterizing constipation needs to be defined. The Rome II diagnostic criteria[28] are the only, among pediatric definitions of functional constipation, which consider this aspect, in that the "majority of stools" should be hard. In BH studies the usual or the modal stool form/consistency has been considered[23, 25, 38]. These limits, however, have never been validated. For adults, hard stools in ≥25% of occasions seemed to describe an unusual pattern[29] and this cutoff point was included in the adult Rome criteria for constipation and for irritable bowel syndrome (IBS)[6, 17, 26, 33, 34]. The Rome III pediatric criteria for children

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[1] Hospital for Rehabilitation of Craniofacial Anomalies, University of São Paulo, Bauru, SP, Brazil; [2] Pediatric Gastroenterology Discipline, Botucatu Medical School – UNESP, Botucatu, SP, Brazil.
Correspondence: Prof. Helga Verena Leoni Maffei - Rua Eng. Edgar Egídio de Souza, 303 apt.51 - 01233-020 - São Paulo, SP, Brazil. E-mail: vlmaffei@uol.com.br

>4 years, introduced the concept of ≥25% of the time for IBS and functional abdominal pain, but not for constipation[27]. Also for younger children there is no mention to the proportion of hard stools in constipation[10].

Stool characteristics and frequency are also included in pediatric functional diarrhea definitions, since it contemplates "the daily passage of ≥3 large unformed stools"[10, 27, 28]. In contrast, the adult Rome II[33] and Rome III[17] definitions consider only stool consistency (>75% or ≥75% of runny stools) but not stool frequency, except for Rome I[6].

Considering that maternal reporting of early-onset constipation may be questionable and that data in young children are limited, we aimed to study the BH, particularly the frequency of constipation, in community-based children of this age group, comparing recalled to recorded data, which to our knowledge has only once been published in children[36]. Considering that the limits for stool characteristics to identify constipation are not clearly defined for children, we used two cutoff points for recorded data.

METHODS

Study population

We studied all non-toilet trained children, in the age range 6-48 months, attending 4 of 19 public day-care nurseries of Bauru, SP, Brazil (a city near the Medical School), and whose mothers or persons in charge agreed to participate in the study. The nurseries serve mainly a low-income population. One of the authors (HCB) provided medical care to one of these nurseries and the other three were randomly chosen from different city suburbs, from a list of those willing to collaborate and with similar feeding routine. All children had received mebendazole or albendazole, as part of a routine 6-12-monthly intestinal parasite treatment regimen. Children with known/suspicious diseases or gross malformations were excluded after a clinical examination by the author.

Sixty-six mother/child pairs were eligible. Children's nutritional status was assessed by conventional technical norms, using the Epi Info Database and statistic software program, based on Center for Disease Control growth charts[4]. At the end of the study, children classified as constipation or functional diarrhea were directed to primary health services or to the university hospital for further clinical examination, diagnosis and care.

Recalled and recorded defecation data

For recall information, mothers were interviewed at the beginning of the study and answered a structured questionnaire, which had been adapted from publications[14, 38, 40] to Brazilian every-day language and habits. Questions were directed to recall the usual BH over the previous 30 days and included the items: presence of straining/painful defecations usually, weekly stool frequency and most frequent/predominant stool characteristics (consistency/form). Stool characteristics asked about were: soft (mushy or like a smooth banana, with, at most, superficial cracks), hard (scybalous, pebble-like or cylindrical with deep cracks), runny (unformed stools that flow, or watery), soft being the adequate consistency, hard and runny the altered consistencies[9, 18].

For recorded data, mothers and nursery staff were trained to recognize stool characteristics as described for recall, and asked to record all defecations over 4 weeks on weekly sheets, at home and in the nursery, respectively. Records began on the monday after the recall questionnaire was applied. Children were included in the study if defecations at home and in the nursery were recorded for at least one entire week. Mean weekly stool frequencies and percentages of each stool characteristic throughout the observed period were obtained for each child.

The BH was classified according to recalled and recorded stool frequency[7, 9, 38, 39] and proportion of stool characteristics (Table 1). As regards recorded data, two criteria were used for classification, taking into account two cutoff points for altered stools: >50% (predominant criterion = majority of altered stools) and ≥25%[6, 17, 33, 34] (adult criterion). As a corollary, the BH was classified as adequate, by these criteria, when ≥50% or >75% of stools were soft, respectively. For constipation by the predominant criterion, the pediatric Rome II "majority of hard stools"[28] was adapted to "hard was the predominant stool consistency among soft, hard, runny, whenever >50% of stools were altered". BH was classified as probable functional diarrhea according to pediatric[9, 10] and adult[33] criteria. Children not classified as adequate BH, constipation or functional diarrhea, by recall or record, were joined under the label "other BH" (Table 1). An abrupt increase in stool frequency to ≥3/day and decrease in consistency to runny stools was considered acute diarrhea.

TABLE 1. Classification of the bowel habit according to defecation frequency and proportion of recalled and recorded stool characteristics

Bowel habit classification	Defecation frequency recalled and recorded n	Stool characteristics		
		Recalled data	Recorded data	
			Predominant criterion	Adult criterion
Adequate	3–21/week*	Predominance of soft stools	Soft ≥50%	Soft >75 %
Constipation	<3/week†	Predominance of hard stools	Soft <50%, % hard >% soft and % hard >% runny	Soft ≤75 % Hard ≥25 % Runny <25 %
Functional diarrhea		≥3 runny stools/day	≥3 runny stools/day	Runny >75%
"Other bowel habit"	≥3/week	Not classified as adequate bowel habit,constipation or functional diarrhea	Soft <50%, no constipation or functional diarrhea	Soft ≤75 %, no constipation or functional diarrhea‡

* except for 6-12 months old infants, with upper limit 26.6[7, 39]
† defecation frequency and/or stool characteristics[9]
‡ "Other bowel habit" by the adult criterion includes hard ≥25% + runny ≥25%

Statistical analysis

Stool frequencies were compared using nonparametric tests. For associations or differences among proportions, the chi-square test was used (Yates or 2 tailed Fisher exact tests when indicated)[30]. Significance was accepted at the 5% level; however, attention was given to whenever analysis just missed significance ($0.10>P>0.05$). Agreement between recalled BH

and the recorded BH classified by each of the two criteria was tested with the Kappa index (K), a measure of reliability for categorical data that represents the degree of agreement beyond that expected by chance. The considered strength of agreement was <0.00 poor; 0.00-0.20 slight; 0.21-0.40 fair; 0.41-0.60 moderate; 0.61-0.80 substantial; 0.81-1.00 almost perfect[13]. The probability of error in accepting the Kappa value was obtained with the z statistics[30].

The study was approved by the Research Ethics Committee of Botucatu Medical School, São Paulo State University - UNESP, and by the directory boards of the public day-care nurseries. During explanatory meetings with the mothers it was clearly stated that participation in the study was voluntary.

RESULTS

Records from home and nursery for at least 1 week were obtained from 57 (86.4%) of the 66 children with recall data; these 57 made up the study group. Data covering 1, 2, 3, 4 weeks were obtained from 9 (15.8%), 15 (26.3%), 23 (40.4%) and 10 (17.5%) children, respectively. Incomplete 4 weeks data was due either to missing day care after the initial weeks (7 children) or to lack of recorded data provided by mothers after 1-3 weeks (40 children). These 40 children had 4 weeks of records in the nursery, but nursery only data were disregarded. Altogether, 1,934 recorded stools comprise the study, median 58.1% being from home.

Clinical characteristics at baseline

Median age of the 57 children was 19.4 months (range 6.0-40.7); 13 of them were younger than 1 year (22.8%), 30 (52.6%) were aged between 1-2 years, 12 (21.1%) between 2-3 years and 2 (3.5%) were older than 3 years. Thirty three of the children were male (57.9%). Median (range) z scores for weight/age and height/age were slightly below reference population values[4], respectively -0.34 (-2.4 to 1.3) and -0.25 (-2 to 1.8), but weight/height was slightly above {0.14 (-1.9 to 2.3)}; no child had signs of acute malnutrition.

Defecation data

Median weekly defecation frequency was slightly lower by recall, 9 (range 2-28), than by record, 11.3 (2-20), but not significantly (Wilcoxon matched-pairs test $P = 0.14$). Stool frequency beyond the considered limits for adequate BH[7, 38, 39] was recalled in three children (5.3%): two, with <3 stools/week, were classified as having constipation also by stool characteristics, and one, with 28 stools/week, was classified as "other BH". Recorded defecation frequency was in the 'normal' range for 56 children (98.2%). The one exception, with 2 stools/week, was classified as having constipation.

Bowel habit frequencies are shown in Table 2. Only 1 child was diagnosed as having probable functional diarrhea, by the adult criterion. Two children had a short episode suggestive of acute diarrhea, but the episode did not influence final classification.

No differences between defecation data of children observed for 2, 3, or 4 weeks were grossly evident. However, the 9 children with only 1 week of observations at home and nursery had a high frequency of "non-adequate" BH, mainly constipation, compared to the 48 children with longer observation (significant for the predominant criterion, Table 3); they also presented a lower recorded weekly defecation frequency than the 48 with longer observation {respectively, median 7.0 (range 2.0-20.0) vs. 11.6 (4.3-20.0), Mann Whitney test $P = 0.007$}.

TABLE 2. Bowel habit (BH) distribution, by recall and by record {n (%)}

Bowel habit	Recalled data	Recorded data	
		Predominant criterion	Adult criterion
Adequate	40 (70.2)	43 (75.4)	20 (35.1)
Constipation	10 (17.5)	6 (10.5)	11 (19.3)
"Other BH"	7 (12.3)	8 (14.1)	25 (43.9)
Functional diarrhea	0 (0.0)	0 (0.0)	1 (1.7)

TABLE 3. "Non-adequate" bowel habit (BH)* distribution according to the number of observed weeks {n (%)}

	1 week (n = 9)	2-4 weeks (n = 48)	*P* (exact Fisher test)
Recalled data	5 (55.5)	12 (25.0)	0. 11 (NS)†
Recorded (>50%)‡	5 (55.5)	9 (18.7)	0.03
Recorded (≥25%)‡	8 (88.8)	29 (60.4)	0.14 (NS)†

*"Non-adequate" BH = constipation plus "other BH" plus functional diarrhea
†NS = non significant
‡Recorded data: >50% of altered stools = predominant criterion; ≥25 of altered stools = adult criterion

Agreement analysis is shown in Table 4. Agreement between recalled and recorded constipation was fair for both criteria (predominant and adult), but just missed significance by the adult criterion (z statistics, $P = 0.07$). All other data presented only slight agreement.

TABLE 4. Agreement analysis (Kappa test) between recalled and recorded bowel habit (BH), by each criterion

Recalled BH	Recorded bowel habitat					
	Predominant criterion			Adult criterion		
	yes	no	Kappa* *P*†	yes	no	Kappa* *P*†
Adequate						
yes (n) 40	31	9	0.07	15	25	0.06
no (n) 17	12	5	0.58 †	5	12	0.56 †
Constipation						
yes (n) 10	3	7	**0.28**	4	6	**0.24**
no (n) 47	3	44	0.03 †	7	40	0.07 †
"Other BH" ‡						
yes (n) 7	2	5	0.16	4	3	0.06
no (n) 50	6	44	0.24 †	22‡	28	0.52 †

* Strength of agreement <0.00 = poor; 0.00-0.20 = slight; 0.21-0.40 = fair
† z statistics. ‡ Functional diarrhea was included in "Other BH"

The children with fair agreement were analyzed separately to detail the changes from recalled to recorded BH (Table 5). Of the 10 children with constipation by recall, 7 (70%) were classified as having adequate BH by the predominant criterion, whereas by the adult criterion only 2 children (20%) presented an adequate BH.

Mothers recalled straining and/or painful defecation in 22 (38.6%) of the children (Table 6). Children with recorded constipation by the adult criterion presented significantly more frequent straining than those with adequate BH and with "other

TABLE 5 Recorded bowel habit (BH) of children with recalled constipation*

Age (mo)/gender	Recalled straining, fecal blood	Stools/week recall x record	% recorded stools			Predominant criterion	Adult criterion
			Soft	Runny	Hard		
19.1 female	Straining, blood	5.0 x16.0	93.8	-	6.2	Adequate	Adequate
26.9 female	---	7.0 x 8.3	80.0	-	20.0	Adequate	Adequate
21.4 female	Straining	7.0 x 8.7	73.1	26.9	-	Adequate	"Other BH"
40.7 male	---	9.0 x 9.7	72.5	10.3	17.2	Adequate	"Other BH"
26.9 female	Straining	9.0 x 8.0	62.5	-	37.5	Adequate	Constipation
15.8 female	Straining	2.0 x 10.0	60.0	10.0	30.0	Adequate	Constipation
12.5 male	---	10.5 x 11.0	54.5	9.1	36.4	Adequate	Constipation
26.0 female	Straining	9.0 x 10.0	40.0	-	60.0	Constipation	Constipation
7.0 male	Straining	2.0 x 7.0	28.6	28.6	42.8	Constipation	"Other BH"†
24.7 female	Straining	7.0 x 9.0	26.5	25.9	47.6	Constipation	"Other BH"†

* ordered according to decreasing percentage of recorded soft stools
† classified as "Other BH", by the adult criterion, because runny and hard stools proportions were each ≥25%

TABLE 6. Frequency of recalled straining/painful defecation {n(%)}* in relation to recalled and recorded bowel habit (BH)

Bowel habit	Recalled data	Recorded data	
		Predominant criterion	Adult criterion
Adequate	12 (30.0)	15 (34.9)	6 (30.0) [a]
Constipation	7 (70.0)	5 (83.3)	8 (72.7) [b]
"Other BH"	3 (42.9)	2 (25.0)	8 (30.8) [a †]
P (chi square) ‡			0.035

* n = number of children with straining
% = n/ number of children with the BH (see Table 2) x 100
† Functional diarrhea was included in "Other BH"
‡ Different letters when P<0.05; Chi square test for recalled data and the predominant criterion are not valid, because of expected cells < 5

BH". Statistical analysis was not possible for the other criteria, but the difference among proportions of straining seemed similar to that presented when the adult criterion was considered, except for recalled "other BH".

Only four children presented 100% soft stools by record (all over age 30 months), but three of these also had bowel movements during additional nursery only records, with hard, but no runny stools. All other children classified as adequate BH by record, presented variable proportions of altered stools. Thus, by the predominant criterion, 81.4% of children with adequate BH had runny consistency at median 15.4% (range 2.9-50.0) of defecations, and 67.4% presented hard consistency at median 11.5% (2.0-37.9) of defecations. By the adult criterion, 75% of the children with adequate BH presented runny and 55% presented hard consistencies, respectively at median 8.3% (range 2.9-20.6) and 3.8% (2.0-20.0) of defecations.

Fifteen children had adequate BH by recall and by the two classification criteria for recorded data (>75% of soft stools).

DISCUSSION

Community studies in children are bound to present difficulties, especially if they are performed with low-income families. Yet 86% of the children enrolled in our study completed at least 1 week of observations, which was higher than the 74.1% compliance to 1 week of recording by Australian children[32]. Because BH changes over time[41], the ideal design would be a 4-week study period. But, taking into account maternal every day difficulties, we considered at least 1 week of complete data as sufficient, which is supported by other studies with 4-7 days of observations[23, 32, 37]. Few studies present 2-4 weeks data[7, 36], one with defecation frequency only[7]. Of note, in our study, children with 1 week of records had a greater frequency of "non-adequate" BH and less stools than those with longer observations (Table 3); had we excluded these data, it would have biased the study group towards adequate BH. It could, of course, be hypothesized that greater difficulties with the BH in these children was one of the reasons that mothers quit the protocol.

Recalled and recorded defecation frequencies in our study were similar to those in published reports with children of the same age range[7, 23, 25, 32, 38, 39]. As expected, recorded frequency was somewhat higher (although not significantly) than recalled frequency, as probably not all mothers know about defecations of their children in nurseries.

Most of our children with adequate BH by record had a certain percentage of runny and/or hard stools, apparently not implying any clinically important alteration; this highlights the importance of adequately defining limits for altered stools to identify "non-adequate" bowel habits, and reinforces our decision to employ two available cutoff points: the pediatric[28] and the cutoff points established for adults[17, 33]. As regards the pediatric limit for constipation, we adapted the Rome II "majority of hard stools"[28] (see Table 1), since "majority", considered as >50% of hard stools, seemed to ample to us; in fact, only three children presented >50% of hard stools.

Children with "other BH" presented a variable proportion of runny and/or hard stools. In some children runny stools predominated and functional diarrhea could be a diagnosis, but it did not fit into definitions[9, 28, 33]. Otherwise, irritable bowel syndrome (IBS) could be a diagnosis, with predominance of either hard and/or runny stools. But, our children could not report abdominal discomfort or pain, because of age, and IBS could not be diagnosed. Therefore, all combinations of hard and/or runny stools not classified as adequate BH, constipation or functional diarrhea were indistinctly classified by us as "other BH" (Table 1) and will not be further analyzed. Indeed, IBS has rarely been mentioned before in young children[12]. Future

studies with follow-up until over 4 years of age are needed to clarify what "other BH" at young age means.

Recalled constipation frequency (17.5%) was within the frequency range reported for children about the same age in Brazil and in developed countries (16%-27%), except for lower frequency of constipation in USA and of hard stools in Thailand[2, 5, 12, 16, 22, 25, 38]. To compare our recorded constipation frequency to literature data, the criterion used must be considered (Table 2): thus, by the predominant criterion, 10.5% was similar to 11% of hard stools recorded over 4 days in South Africa[37], but lower than 27% of hard stools (modal frequency over 7 days) in former Burma[23]. Ethnic, dietary and methodological aspects may explain these differences. There is no study, however, with which to compare our adult criterion 19.3% constipation.

Self-reporting is a valuable additional criterion in assessment of constipation[26, 29], but young children are not yet able to describe unsuccessful defecation attempts or a feeling of incomplete emptying. Therefore, maternal observation of straining (Table 6) in a high proportion of children with recorded constipation reinforced our constipation frequency data.

Recorded data might be more accurate than recalled data, as they are based on prospective observation, but few studies approached this question; these studies, in children with constipation[36] and in healthy adults[8], showed that recall was reasonably accurate when compared to records. Indeed, some variation between BH classifications, by recall and by record, was expected, as 1-4 weeks elapsed between the start and end of our study. Even so recall and record by the predominant criterion should present similarities, as both evaluate predominant data; in fact, there was fair agreement between both, but for constipation only. In addition, fair agreement was achieved also between the adult criterion and recalled constipation, although z statistics just missed significance (Table 4). Inspection of individual data (Table 5), however, pointed to a better relationship between recalled constipation and the adult rather than the predominant criterion: in fact 8 out of 10 children recalled with constipation, either continued classified as constipation (4 children) by the adult criterion, or 'shifted' to "other BH" (4 children), and 2 of the latter presented recalled straining and much more than 25% (>42%) hard stools, which predominated. On the other hand, when the predominant criterion was employed, 70% of the children changed from constipation to adequate BH; this discordance seems too high and warrants consideration. Therefore, it is still disputable which of the recorded criteria is better for classifying constipation. A suggestion would be combining both criteria, to say consider the adult criterion (≥25% of hard stools) and the predominant consistency when both stool characteristics are ≥25%. Using this suggestion, 60% of our constipated children by recall would continue as such by the adult criterion (Table 4), Kappa value would be 0.47 with z statistics <0.002, indicating a better than fair agreement obtained when each of the criteria were analyzed separately. But, although the adult criterion seems good to detect constipation, it also detected the greatest percentage of changes from recalled adequate BH (40 children) to any "non-adequate" recorded BH (25 children) (Table 4). This is not difficult to understand, because "most frequent/predominant stool alteration", used in the recall questionnaire, was compared to a stricter recorded parameter, ≥25% stool alterations. The concept "most frequent/predominant" was chosen because it was more understandable to mothers attending these nurseries than had we asked about ≥25% of stool alterations.

Further studies are needed to determine whether the predominant, the adult, or a combination of both criteria should be employed for children. These studies should contemplate complete physical examination, diagnostic studies and therapeutic interventions with follow up, to investigate whether children classified as constipation by recall, but as "other BH", by record, may have overflow incontinence due to fecal retention. In fact, it is our clinical experience that some young children present soiling associated with constipation even before age 4 years, which disappears soon after beginning stool disimpaction[18, 19]. The adult criterion, if confirmed as desirable and being stricter, would perhaps allow earlier constipation detection and earlier therapeutic intervention before undesirable complications ensue.

In conclusion, by recall, early onset-constipation was confirmed in a high proportion of children attending day-care nurseries (17.5%). Recalled data for constipation seem quite trustworthy, as fair agreement occurred between this procedure and both classification criteria for records — predominant and adult —, respectively 10.5% and 19.3% constipation. Further studies are needed to indicate which of the two used cutoff points should be used, or whether both together. Functional diarrhea was almost absent, and the inability to characterize abdominal pain at young age precludes conclusions on "other BH" in this study.

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RESUMO – ***Contexto*** - Mães relatam início precoce de constipação em crianças atendidas em clínicas de gastroenterologia. ***Objetivos*** - Estudar o hábito intestinal em crianças de baixa idade na comunidade, para avaliar se início precoce da constipação é confirmado neste contexto e se há concordância entre o hábito intestinal relatado e o registrado prospectivamente. ***Métodos*** - Obtiveram-se dados sobre evacuações de 57 crianças com idade 6.0-40.7 meses, mediante relato materno (questionário sobre características fecais predominantes) e, a seguir, foram registradas 1.934 evacuações em casa e na creche. O hábito intestinal foi classificado como adequado, constipação, diarréia funcional, "outro hábito intestinal", conforme frequência evacuatória e proporção das características fecais (macias, duras e/ou que escorrem). Usaram-se dois critérios para classificar o hábito intestinal registrado, devido indefinição no ponto de corte para fezes duras na identificação de constipação em crianças: critério predominante e critério adulto, respectivamente com >50% e ≥25% de evacuações com consistência alterada. Usou-se estatística não-paramétrica e, para concordância entre hábito intestinal relatado e registrado, o índice Kappa. ***Resultados*** - Constipação ocorreu em 17.5%, 10.5%, 19.3% das crianças, respectivamente pelo relato e pelo registro segundo critérios predominante e adulto. Constipação foi o hábito intestinal mais frequentemente relatado, versus 12.3% "outro hábito intestinal". Só uma criança se classificou como tendo diarréia funcional (pelo critério adulto). Concordância entre o hábito intestinal relatado e o registrado foi razoável ("fair") para constipação, pelos critérios predominante e adulto (K=0.28 e 0.24, respectivamente), mas apenas leve ("slight") para os demais hábito intestinal (K ≤0.16). Entretanto, dados individuais indicaram melhor relação entre relato de constipação com o critério adulto do que com o critério predominante. ***Conclusões*** - Confirmou-se que constipação é frequente e de início precoce. Concordância razoável entre o hábito intestinal relatado e o registrado segundo os dois critérios indica que o relato materno é razoavelmente confiável para detectar constipação.

DESCRITORES – Constipação intestinal. Defecação. Berçários. Creches. Criança.

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