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A

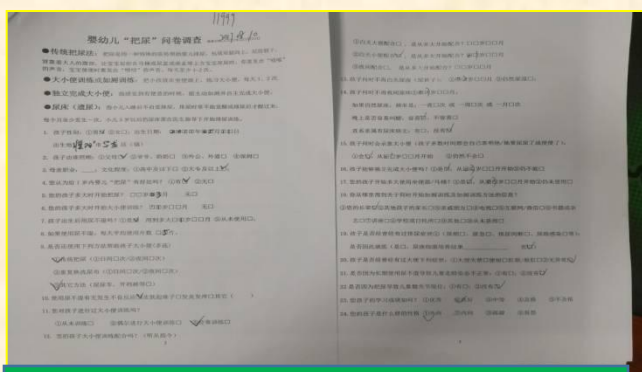


B



A:We were training the inquirers. B:Our inquirer were guiding parents to fill the form.

C



C:Our questionnaire

ABSTRACT AIMS

To investigate the prevalence of Daytime Urinary Incontinence(DUI)among Chinese children aged 3 to 10 years and explore the Influencing factors, especially the use of disposable diapers(DD) after birth .

METHODS

From October 2016 to May 2017,we used stratified sampling method, investigated the relationship of DUI and the using of DD in children aged 3 to 10, in 30 kindergarten and primary schools in one Province, China, by distributing 8900 questionnaires to the parents. The survey letter briefly described the significance of the survey and promised free advice on health issues. Survey contents are factors affecting children’s daytime urinary incontinence (DUI) and its relationship with disposable diaper use[1,2,3].

RESULTS

A total of 8560 qualified questionnaires(96.2%) are collected and used for statistical analysis. The overall prevalence of DUI is 3.52%,ranging from 6.06% in aged 3-year old group to 1.82% in 10-year group. There is significant difference in prevalence between different age groups ($\chi^2=75.690, P<0.001$) and no difference is found between boys and girls ($\chi^2=0.067, P=0.796$) (Table1). With the longer the DD used, the more DUI is founded ($\chi^2=18.824, P<0.001$), the incidence of DUI in children using DD less than 6 months is 2.48%, and when the DD are used in more than 24 months, the incidence of DUI increases by 4.25%. With the increasing frequency of using DD, the incidence of DUI increases ($\chi^2=9.234, P=0.002$). With the delay in the voiding training(potty training), the incidence of DUI is increasing ($\chi^2=9.775, P=0.002$), the incidence of DUI in children who start voiding training(potty training) within 6 months of birth is 2.12%. However, when the start of voiding training is 24 months later, the incidence of DUI increases to 5.85%. The long time using of diapers($OR=1.017 [1.006\sim 1.027], P=0.002$) and the increasing of using frequency of DD ($OR=1.290[1.002\sim 1.025], \chi^2=0.019$) contribute to DUI significantly. Voiding training(potty training)within 6 months was a protective factor for DUI in children ($OR=0.529 [0.345\sim 0.811], P=0.003$). (Table 2)

CONCLUSIONS

Long time using diapers and delay of voiding training are risk factors DUI in children.

Table 1 Incidence of DUI in children aged 3 to 10 in one province of China.

Ages ^a	n ^b	Incidence of DUI (DUI/non-DUI) ^c		
		Incidence rate(patients) ^a	male ^a	female ^a
3 ^a	1072 ^a	6.06% (65) ^a	6.03%(35) ^a	6.10%(30) ^a
4 ^a	1078 ^a	5.47% (59) ^a	5.15%(30) ^a	5.86%(29) ^a
5 ^a	1044 ^a	4.50% (47) ^a	4.74%(26) ^a	4.23%(21) ^a
6 ^a	1093 ^a	4.21% (46) ^a	3.63%(21) ^a	4.86%(25) ^a
7 ^a	1107 ^a	2.98% (33) ^a	2.29%(14) ^a	3.83%(19) ^a
8 ^a	1094 ^a	1.65% (18) ^a	2.05%(12) ^a	1.18%(6) ^a
9 ^a	1027 ^a	1.36% (14) ^a	2.00%(10) ^a	0.76%(4) ^a
10 ^a	1045 ^a	1.82% (19) ^a	2.41%(14) ^a	1.08%(5) ^a
Total ^a	8564 ^a	3.52% (301) ^a	3.55%(162) ^a	3.48%(139) ^a

Table 2 Analysis of the Influencing Factors of DUI in Children Aged 3-10.

Variable item ^a	β ^a	SE ^a	P ^a	OR ^a	OR 95% CI ^a	
					Lower limit ^a	Upper limit ^a
Ages ^a	-0.209 ^a	0.029 ^a	< 0.001 ^a	0.811 ^a	0.767 ^a	0.859 ^a
Length of using DD(months) ^a	0.013 ^a	0.006 ^a	0.025 ^a	1.013 ^a	1.005 ^a	1.249 ^a
Frequency of using DD ^a	0.255 ^a	0.108 ^a	0.019 ^a	1.290 ^a	1.002 ^a	1.025 ^a
Starting time of potty training ^a						
Never potty training ^a				control ^a		
0~6 months ^a	-0.637 ^a	0.218 ^a	0.003 ^a	0.529 ^a	0.345 ^a	0.811 ^a
7~12months ^a	-0.283 ^a	0.202 ^a	0.162 ^a	0.754 ^a	0.507 ^a	1.120 ^a
13~18months ^a	-0.225 ^a	0.222 ^a	0.311 ^a	0.798 ^a	0.516 ^a	1.234 ^a
19~24months ^a	-0.401 ^a	0.258 ^a	0.121 ^a	0.670 ^a	0.404 ^a	1.112 ^a
24months later ^a	-0.002 ^a	0.295 ^a	0.995 ^a	0.998 ^a	0.560 ^a	1.779 ^a

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