Hypothesis / aims of study
Acquisition of bowel and bladder control is a milestone in the development of each child, but remarkable differences are seen between different countries and cultures. In Western society for example, a trend is seen towards a later age at which children are toilet trained. Today, up to 40% of toddlers who attend kindergarten school by the age of 2.5 years, still wears a diaper [1]. On the contrary, toilet training in Vietnam is already started from birth on and most children are using the potty by the age of 9 months [2]. Not only the moment when parents start to train differs a lot, to achieve bladder control also different methods are applied in different cultures. Our study aims to compare methods, readiness signs and reinforcements used in toilet training worldwide.

Study design, materials and methods
A questionnaire was developed, focusing on different aspects of toilet training, such as methods used to toilet train, age at which training is initiated and ended, signs of toilet readiness and how punishments and reinforcements are applied during training. Data were gathered in different countries in different continents: parents in Ghana, Myanmar, Sri Lanka and Bolivia completed the questionnaire. The same questionnaire was distributed to Belgian and Dutch pediatricians, to include the West-European standards considering toilet training.

Results
Most parents in developing countries start toilet training between 7 and 12 months and finish it in the same period (67% Sri Lanka, 65.9% Bolivia and 90% Myanmar and Ghana). The surveyed pediatricians advocate starting between 24 and 30 months and advice a longer training duration. In our countries diapers are seen as a training tool whereas in developing countries they are considered an aid for parents. They use different methods for training, like placing the child on the potty after meals or on fixed times or when showing elimination signals. Belgian and Dutch pediatricians advise to combine different techniques. The main reason to start toilet training according to 78% of the pediatricians, is the age of the child. Sri Lankan parents start toilet training to avoid infections, diaper rash and other contaminations. In Ghana, parents also start to make the child more independent. Strikingly, 93.9% of the pediatricians think parents should start toilet training so the child is ready to go to school. On the contrary, only one interrogated parent marked this reason to start.

The same readiness signs that are considered important for toilet training are described by all surveyed groups: the child has to understand directions or toilet training related words, ask for the potty or indicate he wants to use it, imitate behavior or show interest in the training. Pediatricians and parents from Ghana, Myanmar and Sri Lanka react positive when the child cooperates or when accidents occur. In Bolivia however 75% of the surveyed parents punish the child when accidents happen.

Interpretation of results
The study design does not allow to define a norm for the starting-age, neither to recommend a preferred method. Using diapers isn't always seen as a training method. Recognition of readiness signs seems an important factor worldwide to guile children individually, but in our Western cultural, toilet training is mainly started when the child reaches a certain age. Parents should be well informed about when and how to toilet train.

Concluding message
Our study shows that toilet training is influenced by cultural and environmental factors which influences the definition and the appliance of toilet training in different cultural settings.

References

Disclosures
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