Mechanical safety of pacifiers sold in Portuguese pharmacies and childcare stores

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Potential dangers that arise from the use of pacifiers by children have been reported for the past few decades. The repeated cases of injuries and even fatalities possibly due to poorly designed pacifiers justified the elaboration of guidelines that ensured the mechanical safety of those devices in United States of America, Brazil and European Union.

This experimental study is the first one to describe the submission of a group of pacifiers sold in a European country to a group of tests and determinations that enable the evaluation of its mechanical safety, after EN1400 came into force. Adopted methods included determinations of nipple resistance, total size of the device, presence and size of ventilation holes, performance of a swallowing risk test and label analysis.

All 13 samples were bought in pharmacies and childcare stores in the north of Portugal and belonged to five different brands. The obtained results revealed that all analysed samples presented the minimum required ventilation holes with adequate sizes and correct placement. Also all samples proved to have nipples with adequate resistance to stretch and

never exceeded the maximum permitted size. None of the samples went by the polytetrafluoroethylene (PTFE) device that mimicked the mouth of a child. It is quite clear that pacifiers sold in Portuguese pharmacies and childcare stores present high standards of mechanical security, probably owing to the implementation of EN1400. However, it would be important to perform similar tests on pacifiers sold in internet websites.

Keywords Toddlers, EN1400, asphyxiation prevention