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## The question of backpacks: toward a possible solution

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The paper by Cardon and Balagué<sup>1</sup> synthesizes precisely present-day medical knowledge on the influences that backpacks have, or could have, on the health of schoolchildren. They review all the articles in the literature on the topic, considering the epidemiological and physiological aspects of the question separately.

The authors strongly underline the need not to over-medicalize the problem.<sup>1</sup> This point has clear-cut reasons in the literature: in fact there is a general consensus that the “epidemic” increase of low back pain problems in Western Countries is partly due to the wrong medical approach (mainly biological),<sup>2</sup> together with some changes in society.<sup>3</sup> It seems that the more you speak of low back pain the more sufferers you have.<sup>4</sup> Consequently, the present Clinical Guidelines on back pain strongly support an evidence-based biopsychosocial approach to low back pain,<sup>5, 6</sup> an approach that has been shown to be useful in many studies, as the Cochrane Reviews testify.<sup>7</sup> Moreover, very interesting new studies have verified the usefulness of a media campaign to change society’s approach to the problem toward a less medicalized one:<sup>8, 9</sup> it increases the health of the population while decreasing the inherent costs. According to these scientific premises, the idea of reducing medical attention to low back pain in children too is presumably correct.

In recent years it appears that the problem of low back pain in childhood is rising.<sup>10-12</sup> Obviously, it is

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possible that what has increased is not the problem, but simply the knowledge of something that had always been there and had not been studied before. In my personal view, this rise is in part due to the greater attention paid by parents, today concerned by little health/wellness problems of their few children, inconveniences that in the past were simply neglected. But we also know that there are some critical changes in the everyday life of our children,<sup>10</sup> such as the reduction of sporting activities and in general of stimuli to the motor system, the increase in hours spent watching TV or playing videogames, the number of hours sitting at school or doing homework and, why not, also the weights that some of these frail children carry to school every day (the others arrive by car). Consequently I think that, as always at the basis of low back pain, in children too there are 3 components: social attention and psychological fears, but also, for sure, physical backgrounds.

For years physicians ignored the question of backpacks,<sup>1, 13</sup> and thought the problem was trivial: I used to be one of those, writing that it was a false problem.<sup>14</sup> Only recently have studies been published, even if they generally have methodological flaws.<sup>1</sup> Is it correct to reduce the medicalization of a problem that is already so little medicalized to be almost ignored? Moreover, looking at the multifaceted problem of backpacks, we should not consider only the present

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uncertain health part of the question, but also these unquestionable aspects: wellness (backpacks are too heavy for 79.1% and fatiguing for 65.7% of children<sup>15</sup>), society (it is an important problem for 60.3% of students, 73% of teachers, and 95.1% of parents<sup>16</sup>), and law (the loads carried by children are higher than those permitted by law to adults in Italy<sup>17</sup> and in the European Community<sup>18</sup>). Finally, considering the situation in Italy, if you look at the percentage of body weight carried in other countries,<sup>1</sup> it seems that our average of 22.0% in Milan<sup>13</sup> and 19.8% in Mantua,<sup>19</sup> with once a week at least 30% in 34.8% of children, is more than in the rest of the world. What a record!

As a scientist, I look for the future, and I think that we have to greatly increase our knowledge on the question.

As a physician, I have to make up my mind every day in front of each single child. I am still waiting for the help of scientists, because I know that the present lack of evidence doesn't mean evidence of no importance: simply we don't know enough on the topic to behave scientifically.

As a member of this society, I continue to think that it is time in Italy to give some indications to the school and health systems, even if we must clearly state that, as far as we know today, this is not a health problem: consequently, we scientifically contributed to a law proposal recently presented in the Senato of the Italian Republic.<sup>20</sup>

Last but not least, let me be a father. Barbara, my second 12-year-old daughter, who twice a week walks almost 15 min flexed forward under her huge backpack, does have low back pain. I hope for the future, and for the wellness (or health?) of Federico, my last 3 year-old son.

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