

Injury prevention counselling to improve safety practices by parents in Mexico

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Objectives To evaluate the effectiveness of educational counselling programmes aimed at increasing parents' practice of childhood safety in Monterrey, Mexico, and to provide information aimed at helping to improve the effectiveness of future efforts in this field.

Methods Three different counselling programmes were designed to meet the needs of the upper, middle and lower socioeconomic strata. Evaluation involved the use of baseline questionnaires on parents' existing safety-related practices for intervention and control groups and the administration of corresponding questionnaires after the programmes had been carried out.

Findings Data were obtained on 1124 children before counselling took place and on 625 after it had been given. Overall safety scores (% safe responses) increased from 54% and 65% for the lower and upper socioeconomic strata, respectively, before counselling to 62% and 73% after counselling ($P < 0.001$ for all groups). Improvements occurred both for activities that required caution and for activities that required the use of safety-related devices (e.g. helmets, car seats). However, scores for the use of such devices remained suboptimal even after counselling and there were wide discrepancies between the socioeconomic strata. The post-counselling scores for the use of safety-related devices were 55%, 38% and 19% for the upper, middle and lower socioeconomic strata, respectively.

Conclusions Brief educational interventions targeting parents' practice of childhood safety improved safe behaviours. Increased attention should be given to specific safety-related devices and to the safety of pedestrians. Educational efforts should be combined with other strategies for injury prevention, such as the use of legislation and the improvement of environmental conditions.

Keywords Wounds and injuries/prevention and control; Safety; Counseling; Parents; Parent-child relations; Child behavior; Health education/methods; Socioeconomic factors; Pilot projects; Mexico (*source: MeSH, NLM*).

Mots clés Plaies et traumatismes/prévention et contrôle; Sécurité; Conseil; Parents; Relations parent-enfant; Comportement enfant; Education sanitaire/méthodes; Facteur socio-économique; Projet pilote; Mexique (*source: MeSH, INSERM*).

Palabras clave Heridas y lesiones/prevención y control; Seguridad; Consejo; Padres; Relaciones padres-hijo; Conducta infantil; Educación en salud/métodos; Factores socioeconómicos; Proyectos piloto; México (*fuentes: DeCS, BIREME*).

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Voir page 596 le résumé en français. En la página 596 figura un resumen en español.

انظر صفحة 597 للاطلاع على الكلمات المفتاحية
والمفحص باللغة العربية

Introduction

Most developing countries are experiencing increases in injury-related mortality and morbidity. This is especially true in Latin America. Injury has become a leading killer of Latin American children (1–3).

Despite the significance of the problem, little formal research has been directed towards injury prevention. In developed countries a variety of injury prevention efforts have proved effective. They involve the three main strategies of enforcement, engineering and education (4–7). The latter

includes education for parents on childhood safety, the approaches to which include the use of mass media campaigns and group or one-to-one counselling. Many studies have demonstrated the effectiveness of office-based or clinic-based counselling by primary care providers. Such counselling has increased safety practices by parents and decreased childhood injuries (8–14). The American Academy of Pediatrics reviewed 20 articles on injury prevention counselling in primary care, 18 of which demonstrated its effectiveness (15). Such counselling has been shown to be cost-effective (16).

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Table 1. Overall percent safe response scores, for all children and by age group^a

| Age group (years) | SES ^b | Intervention | | | Control | | |
|-------------------|------------------|--------------|-------------|---------|-------------|-------------|---------|
| | | Pre- | Post- | P-value | Pre- | Post- | P-value |
| <1 | Upper | 72.6 (9.2) | 79.5 (8.2) | 0.01 | 73.4 (10.9) | 75.1 (6.7) | 0.46 |
| | Middle | 68.3 (10.6) | 77.6 (9.2) | 0.02 | 65.0 (10.1) | 73.1 (9.0) | 0.02 |
| | Lower | 62.3 (10.4) | 76.3 (5.1) | <0.001 | 69.0 (14.3) | 62.2 (25.0) | 0.48 |
| 1-4 | Upper | 63.0 (12.1) | 70.8 (8.9) | <0.001 | 64.7 (13.1) | 65.2 (11.3) | 0.79 |
| | Middle | 59.0 (13.7) | 67.4 (9.5) | <0.001 | 59.4 (13.1) | 52.2 (13.9) | <0.001 |
| | Lower | 61.4 (15.8) | 62.0 (16.9) | 0.83 | 60.1 (15.2) | 67.1 (18.6) | 0.03 |
| 5-9 | Upper | 63.0 (13.7) | 70.3 (9.3) | 0.003 | 63.0 (13.0) | 53.7 (10.4) | 0.002 |
| | Middle | 57.1 (13.8) | 62.4 (12.6) | 0.06 | 41.4 (10.9) | 54.8 (16.2) | <0.001 |
| | Lower | 43.5 (10.3) | 61.8 (10.7) | <0.001 | 44.8 (15.3) | 44.0 (13.9) | 0.82 |
| 10-12 | Upper | 69.3 (14.0) | 78.2 (13.1) | 0.10 | 62.7 (9.7) | 71.5 (15.8) | 0.06 |
| | Middle | 63.1 (13.3) | 73.5 (9.7) | 0.003 | 53.2 (14.1) | 59.0 (15.6) | 0.05 |
| | Lower | 53.5 (10.5) | 58.7 (10.7) | 0.01 | 56.8 (12.2) | 61.4 (12.2) | 0.26 |
| Total | Upper | 64.7 (12.9) | 72.8 (9.9) | <0.001 | 66.3 (12.8) | 63.9 (13.4) | 0.12 |
| | Middle | 60.2 (13.7) | 68.0 (11.5) | <0.001 | 54.3 (14.8) | 56.0 (15.5) | 0.28 |
| | Lower | 54.2 (14.9) | 61.8 (13.3) | <0.001 | 55.6 (16.2) | 59.7 (19.7) | 0.09 |

^a Means with standard deviations.

^b Socioeconomic stratum.

There is reason to believe that counselling of this kind might be particularly effective in Latin America, where there have been few such activities and where the baseline safety-related knowledge of parents may be low. We undertook a pilot project to assess whether low-cost educational programmes for parents could improve their practice of childhood safety.

Methods

Setting

The study was conducted in Monterrey, Mexico's third largest city, having a population of 1 500 000. In recent years, various educational programmes have been conducted with a view to increasing parents' practice of childhood safety. In 2000-01, efforts were made to increase such programmes and tailor them to the safety needs and educational backgrounds of parents in different socioeconomic strata in the city. We report an evaluation of the programme developed by the Tec de Monterrey School of Medicine in collaboration with the City of Monterrey. The study was approved by Monterrey's Health Department. The programme was individualized for groups in the upper, middle and lower socioeconomic strata. Before the programme began, baseline information on safety practices was obtained from parents attending clinics or living in neighbourhoods where it was going to be introduced as well as from similar control groups.

For the upper socioeconomic stratum group the sites were two private clinics. For the middle socioeconomic stratum group the sites were two clinics that charged low fees and served a middle-class clientele. For the lower socioeconomic stratum group the sites were publicly subsidized clinics and the neighbourhoods they served.

Counselling on injury prevention

In all the clinics some elements of injury prevention counselling were already being used as part of overall health pro-

motion. This counselling was upgraded in the project under discussion.

For the upper and middle socioeconomic strata the upgrading involved lectures and demonstrations lasting six hours and utilizing audio-visual materials from several sources, including The Injury Prevention Program (TIPP) of the American Academy of Pediatrics (17) and a locally developed programme entitled *Pal Ki* (Healthy Child) in the Mayan language. The topics included motor car and pedestrian safety, burn prevention, home safety and recreational safety. Several such courses were organized in 2000-01.

In addition, parts of the middle socioeconomic stratum group received clinic-based counselling, consisting of talks given in waiting rooms which lasted 15-20 minutes. Some of the above-mentioned audio-visual materials were used. TIPP information sheets in Spanish were given to the participants. Some parents received one-to-one counselling from a doctor.

Injury prevention counselling in the lower socioeconomic stratum group was performed during half-hour household visits by nurses and health promoters attached to community health centres who had received training specifically for this project. The counselling covered the breadth of injury prevention topics appropriate to the ages of the children in each household. TIPP and *Pal Ki* audio-visual materials were used in paper format and occasionally in video format.

For each socioeconomic stratum we attempted to carry out a programme that was specifically matched to the safety situation encountered and the educational level of the people concerned. The costs and person-time inputs were approximately the same for each group.

Baseline interviews

Convenience sampling was used in order to select a group of parents for interview in all intervention and control locations. Verbal consent was obtained. The interviews involved

the use of pre-existing TIPP questionnaires in Spanish. These questionnaires were designed to be completed by parents in waiting rooms so as to provide paediatricians with information on the parents' knowledge of childhood safety. This information was used for counselling purposes during office visits (17).

Separate questionnaires were used for the age groups <1 year, 1–4 years, 5–9 years and 10–12 years and were intended to reflect parental practice of safety and injury prevention in respect of these age groups. Some parents completed more than one questionnaire in order to cover children in different age groups. Completion took between two and ten minutes.

The questionnaires were self-administered in the upper and middle socioeconomic stratum groups while the parents were waiting for clinic visits. In the lower socioeconomic stratum groups the questionnaires were administered verbally during household visits.

Follow-up interviews

The upgraded educational interventions were initiated one to two months after the administration of the baseline questionnaires. The follow-up questionnaires were administered four to six months after the start of the interventions. For the follow-ups in the intervention groups we endeavoured to return to all the persons who had completed baseline questionnaires. In all the intervention groups, however, many more people received counselling than were subsequently interviewed. In the control groups the follow-up interviews included some persons who had completed baseline questionnaires and some who had not. For the follow-ups in the upper and middle socioeconomic stratum groups, some questionnaires were self-administered in the clinic and some by telephone. In the lower socioeconomic stratum groups, all the questionnaires were administered verbally during household visits.

Analysis

Comparisons were made between the questionnaires administered before and after counselling was given. The TIPP questionnaires provided two to four choices for each question. One of these was considered to be the safest response. Each answer was coded as either correct, i.e. the safest response, or incorrect, i.e. any other answer. Questions with no relevance to particular respondents were ignored. For example, the use of a seat belt was not scored if the person concerned did not own or regularly use a car.

A "% correct" score was generated for each questionnaire. Subscores were then generated for the domains of (i) the type of safety behaviour (caution or device) and (ii) the location of the activity concerned (household, recreation or transport). In this context, "caution" refers to activities for which improved safety involves a safe action or the absence of an unsafe one, and "device" refers to activities for which specific safety-related devices have to be purchased or used, e.g. car seats and smoke detectors.

Comparisons were made of the mean percentages of correct responses before and after counselling in respect of both overall scores and the scores for each of the above domains. Similar comparisons were made for several

important individual questions, e.g. on the use of seat belts. Separate comparisons were made for each intervention and control group in each socioeconomic stratum.

Statistical comparisons were made by means of the unpaired Student's *t*-test, the χ^2 test or Fisher's exact test (18).

Results

The response rates of people approached for interview were approximately 80% in each socioeconomic stratum group. A total of 1749 questionnaires were completed, 1124 before and 625 after counselling. The "before" group represented responses involving at least 1124 children. In some cases, parents had more than one child in a particular age group but only completed one questionnaire. Specific information on the number of children represented by each questionnaire was not collected. The completed questionnaires were equally distributed among the socioeconomic stratum groups and between intervention and control sites. The age distribution was: <1 year, 13%; 1–4 years, 30%; 5–9 years, 34%; 10–12 years, 23%.

The overall mean percent safe response scores increased from 65% to 73%, 60% to 68% and 54% to 62% in the intervention groups of the upper, middle and lower socioeconomic strata, respectively. No significant changes were detected in the three control groups (Table 1). In the intervention groups, improvements were most notable among children aged 1–4 years and 5–9 years. Smaller improvements occurred in children aged <1 year, for whom the pre-counselling scores were highest, and in children aged 10–12 years.

In most intervention groups there were significant improvements in respect of actions involving caution and those involving the use of devices (Table 2). The scores relating to caution had already been fairly high.

For the use of safety-related devices the baseline scores were low in comparison with the baseline caution scores. In the intervention groups, improvements were seen for the upper and lower socioeconomic stratum groups (Table 2). Despite the improvements, post-counselling scores remained considerably lower for "device" than for "caution". Only the upper socioeconomic stratum group had a mean score above 50% for the use of safety-related devices after the intervention. Moreover, after the intervention there was only a small gap between the socioeconomic stratum groups in respect of caution scores but there were major differences in the use of safety-related devices, for which the post-intervention scores were 55%, 38% and 19% in the upper, middle and lower socioeconomic stratum groups, respectively.

With regard to the location categories there were modest improvements for household and recreational safety and substantial improvements for transport safety (Table 3). For household safety the three intervention groups had similar baseline scores and showed similar levels of improvement. For recreational safety, only the middle socioeconomic stratum intervention group showed improvement. For transport safety there were increases exceeding 10% in the mean scores for both the upper and lower socioeconomic stratum intervention groups (Table 3).

Table 2. Percent safe response scores by type of activity (caution versus use of device)^a

| SES ^b | Intervention | | | Control | | |
|------------------|--------------|-------------|-----------------|-------------|-------------|-----------------|
| | Pre- | Post- | <i>P</i> -value | Pre- | Post- | <i>P</i> -value |
| Caution | | | | | | |
| Upper | 73.0 (15.5) | 81.6 (11.9) | <0.001 | 75.9 (13.6) | 70.2 (16.4) | <0.001 |
| Middle | 73.5 (15.8) | 81.0 (13.4) | <0.001 | 70.4 (17.5) | 70.9 (18.8) | 0.80 |
| Lower | 72.1 (18.2) | 79.0 (15.1) | <0.001 | 70.9 (19.4) | 74.0 (21.3) | 0.23 |
| Device | | | | | | |
| Upper | 47.6 (21.8) | 54.5 (18.6) | 0.002 | 46.1 (24.6) | 49.0 (20.6) | 0.26 |
| Middle | 34.4 (24.0) | 38.2 (24.6) | 0.21 | 16.3 (19.9) | 23.8 (21.7) | <0.001 |
| Lower | 11.6 (20.0) | 18.8 (23.7) | <0.001 | 19.6 (23.9) | 22.7 (31.0) | 0.40 |

^a Means with standard deviations.

^b Socioeconomic stratum.

Table 3. Percent safe response scores by location of activity (household versus recreation versus transport)^a

| SES ^b | Intervention | | | Control | | |
|-------------------|--------------|-------------|-----------------|-------------|-------------|-----------------|
| | Pre- | Post- | <i>P</i> -value | Pre- | Post- | <i>P</i> -value |
| Household | | | | | | |
| Upper | 58.6 (15.1) | 65.5 (13.9) | <0.001 | 61.4 (15.4) | 57.3 (13.9) | 0.01 |
| Middle | 58.5 (15.1) | 62.9 (16.5) | 0.03 | 56.8 (14.0) | 53.7 (17.2) | 0.05 |
| Lower | 59.1 (14.7) | 61.7 (14.1) | 0.07 | 58.2 (15.6) | 61.8 (18.0) | 0.10 |
| Recreation | | | | | | |
| Upper | 67.9 (37.1) | 72.0 (38.4) | 0.3 | 74.6 (35.0) | 60.8 (36.8) | <0.001 |
| Middle | 61.1 (37.3) | 71.5 (35.8) | 0.02 | 64.0 (36.8) | 66.7 (32.9) | 0.44 |
| Lower | 61.1 (35.8) | 66.0 (31.1) | 0.13 | 63.3 (38.6) | 63.4 (38.5) | 0.99 |
| Transport | | | | | | |
| Upper | 72.6 (27.1) | 84.8 (24.6) | <0.001 | 69.9 (28.5) | 79.2 (26.4) | 0.003 |
| Middle | 48.5 (35.1) | 55.0 (34.8) | 0.13 | 35.6 (28.8) | 43.6 (33.1) | 0.01 |
| Lower | 31.0 (29.7) | 42.9 (34.9) | <0.001 | 34.3 (35.4) | 38.2 (32.4) | 0.44 |

^a Means with standard deviations.

^b Socioeconomic stratum.

Post-counselling scores in the intervention groups showed only small differences between the socioeconomic stratum groups for household and recreational safety. There were, however, major differences between these groups in respect of transport safety. The post-intervention scores were 85%, 55% and 43% in the upper, middle and lower categories, respectively.

Details of several important factors are presented in Table 4. The use of bicycle helmets improved in the middle and lower socioeconomic stratum intervention groups. All of the socioeconomic stratum groups reported usage rates in the 45–48% range after counselling. Minimal changes were seen in the relatively subjective matter of children's knowledge on crossing roads safely.

Two of the most effective burn prevention strategies showed no improvement. Neither checking the temperature of water heaters nor the use of smoke detectors improved after counselling. The usage of smoke detectors remained negligible in all groups.

The use of car seats by children aged 0–4 years increased in the lower socioeconomic stratum group, where it had been negligible. The use of seat belts for children aged 5–2 years increased in the upper socioeconomic stratum group.

Discussion

The study had the following limitations:

- It relied on self-reporting by respondents and there was no way of validating their answers.
- The method of questionnaire administration and the nature of the interventions differed between the socioeconomic stratum groups. Such differences possibly affected the validity of comparisons. Identical data-gathering and interventions would have increased the rigour of the comparisons. However, we feel that this would not have been appropriate for achieving the goals of the project. The socioeconomic stratum groups

Table 4. Percent safe responses for individual questions^a

| SES ^b | Intervention | | | Control | | |
|--|--------------|------------|---------|-------------|------------|---------|
| | Pre- | Post- | P-value | Pre- | Post- | P-value |
| Does your child wear a helmet every time he or she rides a bicycle? (5–9 and 10–12 years) | | | | | | |
| Upper | 33 (35/105) | 48 (15/31) | 0.13 | 16 (7/44) | 20 (11/56) | 0.63 |
| Middle | 20 (21/103) | 45 (18/40) | 0.003 | 12 (12/98) | 15 (12/81) | 0.62 |
| Lower | 6 (6/107) | 46 (45/98) | <0.001 | 10 (8/80) | 7 (2/30) | 0.72 |
| Has your child learned to cross the street safely? (5–9 years) | | | | | | |
| Upper | 66 (48/73) | 74 (17/23) | 0.47 | 93 (27/29) | 21 (8/38) | <0.001 |
| Middle | 67 (39/58) | 41 (11/27) | 0.02 | 73 (43/59) | 59 (23/39) | 0.15 |
| Lower | 71 (44/62) | 65 (41/63) | 0.48 | 66 (35/53) | 57 (12/21) | 0.47 |
| Have you checked the temperature of the hot water where you live? (1–4 years) | | | | | | |
| Upper | 1 (1/67) | 0 (0/25) | 1.00 | 2 (1/42) | 7 (2/29) | 0.56 |
| Middle | 0 (0/16) | 0 (0/18) | — | 0 (0/38) | 0 (0/36) | — |
| Lower | 7 (2/28) | 4 (1/27) | 1.00 | 5 (1/22) | 0 (0/15) | 1.00 |
| Do you have a working smoke or fire detector in your home? (All age groups) | | | | | | |
| Upper | 9 (20/219) | 11 (8/76) | 0.72 | 7 (10/138) | 3 (3/101) | 0.15 |
| Middle | 4 (6/152) | 6 (4/72) | 0.73 | 1 (2/194) | 5 (6/133) | 0.07 |
| Lower | 0 (0/175) | 1 (1/160) | 0.48 | 3 (4/132) | 2 (1/63) | 1.00 |
| Does your child use a car seat? (<1 and 1–4 years) | | | | | | |
| Upper | 82 (80/98) | 84 (37/44) | 0.72 | 82 (74/90) | 89 (41/46) | 0.29 |
| Middle | 42 (32/77) | 44 (15/34) | 0.80 | 19 (12/62) | 26 (11/42) | 0.41 |
| Lower | 4 (2/49) | 25 (6/24) | 0.01 | 10 (5/51) | 14 (2/14) | 0.64 |
| Does your child use a seat belt? (5–9 and 10–12 years) | | | | | | |
| Upper | 43 (50/116) | 79 (27/34) | <0.001 | 22 (11/51) | 96 (54/56) | <0.001 |
| Middle | 40 (44/111) | 53 (23/43) | 0.12 | 18 (18/101) | 52 (44/85) | <0.001 |
| Lower | 21 (21/101) | 19 (17/88) | 0.80 | 28 (22/80) | 22 (5/23) | 0.58 |

^a For each percentage the number of respondents providing safe answers and the total number of respondents are given in parentheses.

^b Socioeconomic stratum.

differed in their risk factors and educational backgrounds. The study was concerned with evaluating a programme in which the most appropriate method was used for each group.

- The number of respondents in the follow-up group was 56% of that in the pre-counselling group. Those who were lost to follow-up may have been somewhat different from those who completed the study, thus biasing the results.
- The activities of the project were not performed in isolation. The controls continued to receive some injury prevention counselling, and this evolved during the study period. They were also exposed to mass media messages. These influences may explain why improvements occurred in some safety behaviours in the control groups (Tables 2–4). In some cases this even happened when no improvements were seen in the corresponding intervention groups.

Despite these limitations, some conclusions can be drawn on the effectiveness of injury prevention counselling and about ways to improve it. The brief educational sessions were clearly effective in improving parents' practice of childhood safety. Overall safety scores improved for all intervention groups while remaining unchanged in controls (Table 1). These findings agree with studies from developed countries, where the effectiveness of office-based or clinic-based counselling has been demonstrated (8–16).

Our study also suggests ways in which future efforts might be made more effective. Caution is generally less reliable than the use of specific, highly effective injury prevention devices, such as helmets, seat belts and smoke detectors (4–7). It should be noted that, notwithstanding the improvement in the use of safety-related devices (Table 2), the percent safe response scores remained much lower for the use of devices than for caution. Moreover, the largest discrepancies between the groups were in the "devices" category, with the lower socioeconomic group having scores for the use of safety-related devices of only 19% even after the intervention. The use of some safety-related devices, e.g. smoke detectors, remained negligible in all groups.

Although the use of car seats for children aged 0–4 years increased, there was still a substantial proportion among the middle and lower socioeconomic stratum groups who did not use them, even after counselling. In Mexico, moreover, many younger children travelling in cars sit in devices that are not safety-related car seats held in position by seat belts. Consequently, improvements in the rates of car seat use for children aged 0–4 years may or may not reflect the use of proper car safety seats.

Another extremely effective injury prevention strategy is that of reducing temperatures in water heaters. Only one parent in all three intervention groups had checked the temperature of such a heater.

The data give some indications as to how counselling might be made more effective. Furthermore, it is necessary

to consider the availability and cost of devices that have to be purchased by parents, such as car seats, helmets and smoke detectors. Some such items, e.g. car seats, were available in shops in the study area but others were very hard to find or were too expensive for most parents. It is therefore necessary to consider broader efforts to interact with manufacturers or merchants with a view to making these items more available to the public.

Because there is a limit to what can be accomplished by educational efforts, consideration should be given to safety-related legislation, engineering and infrastructure (4, 6, 7). For example, the low rate of seat belt use in the lower socioeconomic stratum may be only partly attributable to a lack of knowledge. Until four years ago, seat belts were not required on the rear seats of vehicles manufactured in Mexico. Consequently, seat belts may not exist in the older vehicles to which children in the lower socioeconomic stratum have access. Although this matter is now covered in Mexican law, many other legal and infrastructural questions remain to be addressed in the interest of child safety. Funding for injury prevention should be increased, as should the capacities of professionals and institutions to carry out effective work on injury prevention.

Special consideration should be given to injuries affecting pedestrians, which account for 66% of childhood injury deaths in Monterrey (19–21). This is a huge problem for which educational efforts are not sufficient. A safer infrastructure is required, e.g. an increase in the number of safe

pedestrian crossings and the separation of vehicle and pedestrian flows by road design. The safety of pedestrians also requires more effective enforcement of the speed restrictions applicable to motor traffic in heavily populated areas (22–25).

In conclusion, the study demonstrated the effectiveness of brief injury prevention counselling in increasing the practice of childhood safety by parents in Monterrey. It indicated ways in which such educational efforts could be improved, for instance by giving increased attention to car seats, seat belts, pedestrian safety and smoke detectors. Such efforts should be implemented on a more regular and widespread basis and should be combined with other approaches, involving, for example, legislative measures and infrastructural improvements. The high childhood death rates attributable to injuries caused by motor vehicles and other factors in Latin America make it vital to give greater attention to injury prevention. ■

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Résumé

Programmes de prévention des traumatismes pour améliorer les mesures de sécurité appliquées par les parents au Mexique

Objectif Évaluer l'efficacité des programmes de conseil visant à familiariser les parents avec les mesures de sécurité pour enfants à Monterrey au Mexique, et fournir des informations pour que les futures dispositions prises dans ce domaine soient plus efficaces.

Méthodes Trois différents programmes de conseil ont été conçus pour répondre aux besoins des couches socio-économiques supérieure, moyenne et inférieure. L'évaluation a consisté en l'administration d'un questionnaire de base sur les mesures de sécurité appliquées par les parents dans un groupe d'intervention et un groupe témoin ; après la mise en œuvre de ces programmes, un questionnaire de suivi a également été administré.

Résultats Des données ont été recueillies chez 1124 enfants « avant conseil » et chez 625 « après conseil ». Les résultats d'ensemble des contrôles de perception des mesures de sécurité (% de réponses correspondant à une sécurité maximale) sont passés respectivement de 54 % et 65 % avant conseil dans les couches socio-économiques inférieure et supérieure, à 62 % et 73 % après conseil ($p < 0,001$ tous groupes confondus). On a

constaté des améliorations autant pour les activités qui exigeaient un comportement prudent que pour celles qui nécessitaient le recours à un moyen de sécurité (par ex. casque, siège d'auto pour bébé). Toutefois, les résultats concernant l'utilisation de ces moyens restaient sous-optimaux même après conseil, et les écarts étaient importants d'une couche socio-économique à l'autre. Les résultats après conseil concernant l'utilisation de moyens de sécurité étaient respectivement de 55 %, 38 % et 19 % dans les couches socio-économiques supérieure, moyenne et inférieure.

Conclusion Une action pédagogique de courte durée axée sur les méthodes utilisées par les parents pour assurer la sécurité de leurs enfants a permis de rendre les comportements plus sûrs. Les moyens de sécurité et la sécurité des piétons devraient retenir davantage l'attention. Une action pédagogique devrait être associée à d'autres stratégies pour prévenir les traumatismes, telles que le recours à des textes de loi et l'amélioration des conditions extérieures.

Resumen

Asesoramiento de prevención de traumatismos para mejorar las prácticas de seguridad entre los padres en México

Objetivo Evaluar la eficacia de programas de asesoramiento destinados a mejorar las prácticas de seguridad de los progenitores con sus niños en Monterrey (México) y proporcionar información encaminada a mejorar la eficacia de los futuros esfuerzos en este campo.

Métodos Se formularon tres programas de asesoramiento distintos en función de las necesidades de los estratos socioeconómicos superior, medio e inferior. La evaluación incluía el uso de cuestionarios de referencia sobre las prácticas seguidas por los padres en relación con la seguridad, con grupos de intervención y de control, y la administración de esos mismos cuestionarios tras haber llevado a cabo los programas.

Resultados Se obtuvieron datos sobre 1124 niños antes del asesoramiento, y sobre 625 después del mismo. La puntuación global de la seguridad (% de respuestas correspondientes a la opción segura) aumentó del 54% y el 65% antes del asesoramiento para los estratos socioeconómicos inferior y superior, respectivamente, al 62% y el 73% después del mismo

($P < 0,001$ para todos los grupos). Se observaron mejoras tanto para las actividades que requerían precaución como para el uso de dispositivos de seguridad (p. ej., cascos, asientos para niños). Sin embargo, las puntuaciones para el uso de tales dispositivos se mantuvieron por debajo de lo deseable incluso después del asesoramiento, y se observaron grandes discrepancias entre los estratos socioeconómicos. Las puntuaciones postasesoramiento para el empleo de dispositivos de seguridad fueron del 55%, 38% y 19% para los estratos socioeconómicos superior, medio e inferior, respectivamente.

Conclusión Las prácticas de seguridad de los padres para con sus hijos mejoraron tras llevar a cabo intervenciones educativas breves centradas en dichas prácticas. Hay que prestar más atención a determinados dispositivos de seguridad y a la seguridad de los peatones. Los esfuerzos educativos deben combinarse con otras estrategias de prevención de los traumatismos, como la aplicación de legislación y el mejoramiento de las condiciones ambientales.

ملخص

الوالدين المتعلقة بسلامة أطفالهم في المكسيك: اتوعية بسبيل الوقاية من الإصابات لتحسين ممارسات

(0.001 لجميع المجموعات). ونلاحظ تحسن في الأنشطة التي تحتاج إلى حذر والأنشطة التي تحتاج إلى استخدام أجهزة أمان (مثل الخوذة، ومقاعد السيارة). ومع ذلك، ظلت أحوال استخدام هذه الأجهزة أقل من المستوى الأمثل، حتى بعد التوعية، ولم تحظت فروق تامة بين الطبقات الاجتماعية الاقتصادية المختلفة. أما الأحرار المعطاة مستوى استخدام أجهزة الأمان بعد التوعية فكانت 55%، و38%، و19% للطبقات الاجتماعية الاقتصادية العالية والمتوسطة والمنخفضة على التوالي.

الملاحظة: أدت المداخلات التثقيفية الوحيدة، التي استهدفت التزام الوالدين بالممارسات التي تكفل سلامة أطفالهم، إلى تحسين سلوك الوالدين في هذا الصدد. وببني إلاء مزيد من الاهتمام باستخدام الأجهزة التوعوية المتعلقة بالسلامة، والالتزام بسلامة المشاة في الطريق، كما يوصى باقتراح الجهود التثقيفية باستراتيجيات أخرى للوقاية من الإصابات، مثل سن التشريعات وتحسين الأوضاع البيئية.

الغرض: تقييم فعالية برامج التوعية التثقيفية التوعوية إلى زيادة التزام الوالدين بالإجراءات التي تكفل سلامة أطفالهم في مدينة مونتيري، في المكسيك، وتوفير معلومات تساعد على تحسين فعالية الجهود المستقبلية في هذا المجال. الطريقة: تم تحصيل ثلاثة برامج توعية مختلفة لتلبية احتياجات التطبيقات الاجتماعية الاقتصادية العالية والمتوسطة والمنخفضة للمجتمع. وشمل التقييم طرح استبيانات لجميع العنومات الأساسية حول الممارسات الحالية لوالدين في ما يتعلق بسلامة الأطفال، لكل من مجموعة المداخلات والمجموعة الشاهدة، وطرح استبيانات متابعة بعد الانتهاء من تنفيذ البرامج.

الملاحظات: تم الحصول على معطيات حول 1124 طفلاً قبل تنفيذ برامج التوعية وحول 625 طفلاً بعد تنفيذ برامج التوعية. وتبين زيادة درجات السلامة العامة (النسبة المئوية للإمتحانات لشروط السلامة) من 54% و65% للطبقتين الاجتماعية الاقتصادية المنخفضة والعالية على التوالي قبل التوعية إلى 62% و73% على التوالي بعد التوعية (معامل الدقة P أقل من

الكلمات المفتاحية: الإصابات؛ الوقاية من الإصابات؛ طب الأطفال؛ الطفولة؛ السلامة؛ التوعية؛ البلدان النامية؛ أمريكا اللاتينية.

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