



Increasing Motor Vehicle Restraint in the Hispanic Community

Introduction:

Cincinnati Children's Hospital Medical Center, division of Trauma Services, was awarded a grant for the purpose of implementing a trauma injury prevention program in the Hispanic Community. The ultimate purpose of the grant was to reduce the risk of injury and death in the Hispanic Community by increasing motor vehicle restraint.



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Executive Summary:

Cincinnati Children's Hospital Medical Center (CCHMC) is one of the largest pediatric health care facilities in the U.S. Our mission is to improve child health and transform delivery of care through fully integrated, globally recognized research, education, and innovation for patients from our community, the nation, and the world. Our Trauma Center is a recognized leader in both the care of the injured child and the prevention of injuries. Our program has been verified at the highest level (Level I) by the American College of Surgeons (ACS) Committee on Trauma continuously since 1993. Our unique and successful injury prevention initiatives have been recognized by the National Highway and transportation Safety Administration (NHTSA), the National Association of Children's Related Institutions (NACHRI), and the Ohio Department of Public Safety (ODPS), amongst others.

In 2004, after reviewing injury and mortality statistics among Hispanic children, pediatric trauma surgeons and injury prevention coordinators from Trauma Services recognized an immediate need to launch a Youth Injury Prevention Initiative (YIP) geared to prevent further injury and death among our rapidly growing Hispanic population. After the development and successful faith based implementation of our multi-generational program in the greater Cincinnati/Northern Kentucky area, we sought to expand our efforts to the city of Columbus with grant support and funding from the Emergency Medical Services (EMS).

To implement our car passenger safety education grant entitled "Increasing Motor vehicle Restraint in the Hispanic Community" in the city of Columbus, we partnered with



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the Ohio Hispanic Coalition of Columbus (OHCC). The OHCC has strong ties with Hispanic churches and our partnership with them was essential in gaining access to the Hispanic Faith Community and to the successful implementation of the program.

The leadership and support of members of the faith community were also key elements for the success of our outreach to the Hispanic community. Our partners not only allowed us to use their church facilities but also assisted us with the recruitment of parishioners to attend our presentations and car seat check events. Church leaders also contributed to our efforts by endorsing the importance of child passenger safety during their sermons

In order to measure the success of our program we selected 3 churches to receive our intervention and compared their improvement in safety behaviors to 3 control churches that did not receive the program. Unannounced observations conducted pre-program and immediately post-program demonstrated substantial improvements in motor vehicle restraint use among drivers, adult passengers, and child passengers.

The following chart shows the selection and classification of our partner churches:

| <u>Intervention Churches</u> (received program) | <u>Control Churches</u> (did not receive program) |
|--|--|
| St. Stephen the Martyr – San Esteban 4031 Clime road Columbus, OH 43228 | Hispanic Church of America 6161 Bush Blvd Suite 85 Columbus, OH 43229 |
| St. James the less – Santiago Menor 1652 Oakland Park Ave Columbus, OH 43224 | Iglesia Cristiana 3750 Sullivan Ave Columbus, OH 43228 |
| Christ the King – Cristo Rey 2777 E. Livingston Avenue Columbus, OH 43209 | Iglesia Pentecostés del Dios Viviente 3857 Sullivan Ave Columbus, OH 43228 |



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The generous support received from the Ohio Department of Emergency Services permitted us to provide child passenger safety education to approximately 120 children and 240 adults at the intervention churches. In addition to our direct education of children and adults, safety messages were conveyed by the churches' leaders to all members of the congregations totally approximately 900 parishioners. Besides addressing the lack of safety restraint use through education, we also addressed financial barriers to safety by providing free car seats and booster seats to those participant families in need. To ensure proper fitting of the car seats we conducted 3 car seat check events, one at each participating church. During these seat checks, bilingual Spanish speaking child passenger safety technicians from Cincinnati Children's and the Ohio Hispanic Coalition instructed parents in the proper installation of their car seats.

Principal Investigator:

Richard Falcone: Director of Trauma Services at Cincinnati Children's has an extensive background in trauma research including epidemiologic studies, quality of care studies and design and evaluation of injury prevention programs.

Co- Investigators:

Gloria Del Castillo: Coordinator for Trauma Service's Hispanic Youth Injury Prevention Initiative at Cincinnati Children's Hospital Medical Center, has extensive experience delivering instruction of injury prevention subjects for native and non-native English speakers and is the only bilingual Spanish certified child passenger safety instructor in Ohio



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Josue Vicente: Executive director for the Ohio Hispanic Coalition, has vast experience conducting statewide outreach to the Latino communities in Cleveland, Toledo, Delaware, Bowling Green, Marion, Cincinnati, Dayton, and other major cities in Ohio

Heather Evans: Clinical Research Coordinator for Trauma Services at Cincinnati Children's Hospital Medical Center, has extensive experience in the field of experimental and clinical research and data entry and analysis.

Key Factors:

The result of 6 previous focus groups suggested that the success of an intervention would depend of our capability to address 3 main safety barriers to safety in the Hispanic Community: language barriers, lack of knowledge resulting in poor safety habits, and inability to afford safety devices.

Language barrier

The language barrier is an important aspect to consider when implementing the safety curriculum. Studies show it takes anywhere from 5 to 7 years for an average adult to learn a new language. CCHMC addressed this barrier by providing information and education to the Hispanic community in Spanish and having bilingual staff working hands on in the implementation of the program. In order to assure an effective outreach and obtain a positive outcome our curriculum and presentations were imparted in Spanish

Lack of knowledge and poor safety habits

Seat belt laws are rare in the vast majority of Latin American countries. Although some countries have passed seat belt laws in the last ten years, such laws are only haphazardly enforced in the larger cities and not at all in the smaller rural communities, so when



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immigrants come to the United States, they have not acquired the habit of wearing seat belts and are unaccustomed to laws requiring their use. We have addressed this barrier by developing and implementing a culturally sensitive multigenerational program aimed to educate children, teens and adults in the importance of motor vehicle safety

Children received education in the following topics:

- Importance of buckling up properly
- Selecting the proper seating position in vehicle
- Identifying correct travel behavior

Adults received presentations covering the following subjects:

- What happens in a crash?
- Air bag safety
- Drinking and driving
- Child passenger safety

Teenagers also attended the following presentations:

- Teens on wheels - making the right choice
- Drinking and driving
- What happens in a crash?

Inability to afford car seats

With a large percent of the Hispanic population living under the poverty line, many families cannot afford new car seats and either don't use them or turn to garage sales and second hand stores to obtain child restraints thus placing their children at a risk of travelling in outdated, expired, or recalled car seats. To address this barrier we utilized EMS grant funds to provide free car seats to all those families that demonstrated a need and attended our safety presentations.



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The following chart reflects a breakdown of the car seat distribution at intervention church:

| | St. Stephen the Martyr – San Esteban | St. James the less – Santiago Menor | Christ the King – Cristo Rey | Total child restraints distributed |
|-----------------------|--------------------------------------|-------------------------------------|------------------------------|------------------------------------|
| Convertible car seats | 24 | 6 | 14 | 44 |
| Combination car seats | 24 | 6 | 12 | 42 |
| High back boosters | 20 | 10 | 8 | 38 |
| No back boosters | 20 | 8 | 8 | 36 |
| | 88 | 30 | 42 | 160 |

In summary, barriers to appropriate use of occupant restraints in the Hispanic community are multi-factorial and include lack of information, poverty, language barriers, situational factors, ethanol use, parenting styles, and conflicting cultural and legal norms. In order to effect a positive change in the Hispanic community, these barriers to safety must be comprehensively addressed in a culturally sensitive manner.

Financial Issues and Considerations:

Due to the large quantity of children in need of car seats, we found it necessary to re-arrange the distribution of grant funds, soliciting and acquiring EMS approval to utilize money previously allocated to “incentives” for the purchase of extra car seats

Education and training issues and considerations:

The lack of government lead campaigns addressing the use of motor vehicle restraints in the Ohio Hispanic community constitutes one more barrier to safety and to the prevention of injury and death in this fast growing population. In order to efficiently deliver safety



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messages and promote awareness in the Hispanic population it is vital to not only develop culturally relevant educational resources but also to ensure the availability of Spanish speaking child passenger safety technicians. Our research shows that currently there are only 6 bilingual/ Spanish child passenger safety technicians in the state of Ohio (Safe Kids registry). With census data showing approximately 280,000 Hispanics in the State and only 45% of which speak English*. The ratio of CPS technicians is therefore only approximately 1 for every 23,000 people and the Hispanic population in our state continues to grow. Although we were successfully able to recruit enough Spanish speaking CPS technicians for our car seat check events, we also recognize doing so was a challenging task. *<http://pewhispanic.org/states/?stateid=OH>

Data and information issues and considerations:

When measuring the success of a motor vehicle restraint program through seat belt usage observations it is crucial that these occur without pre-notification of the group being observed in order to collect unbiased information. Although the leader of the church should be aware of ongoing observations, congregation members should not be informed of the day of observation.

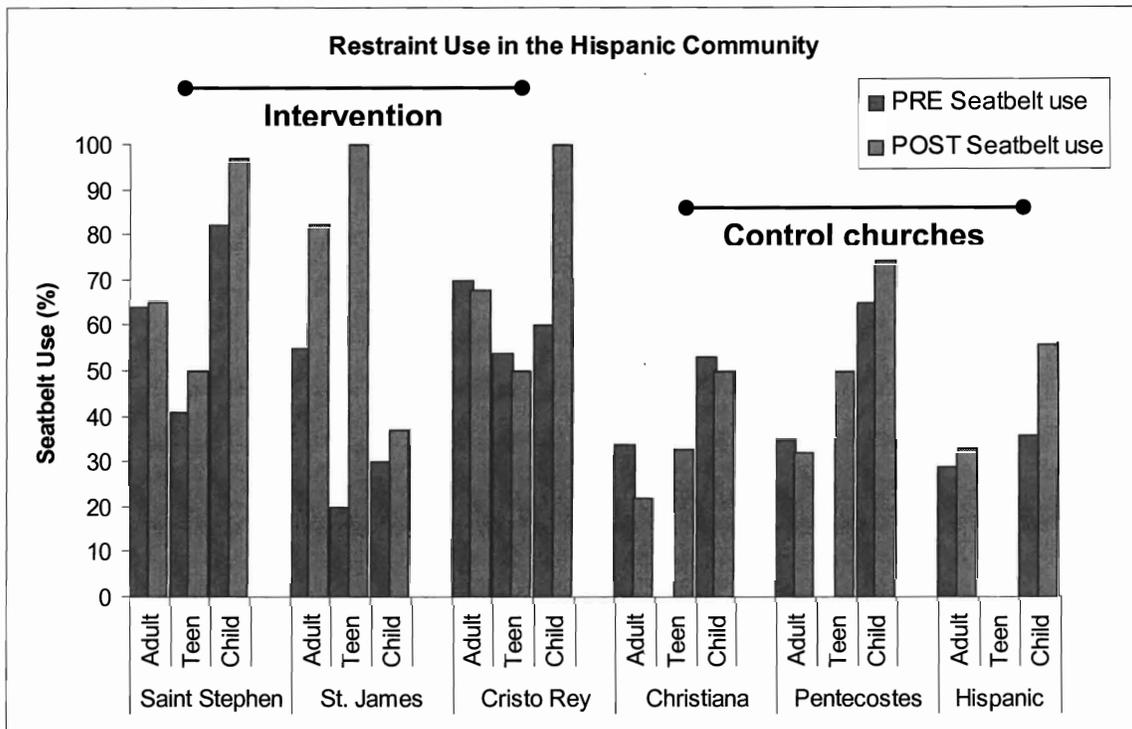
Data Analysis:

Evaluation of data from motor vehicle restraint observations of 360 vehicles and 939 drivers and passengers demonstrated a marked increase in restraint use in the churches who participated in the program. After implementation of the educational program in 3 Hispanic church congregations, we noted a rise in child, teen, adult passenger and driver restraint use. Within the intervention churches who received the educational program, the



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number of adults passengers restrained increased from 63% to 72%; the number of teens restrained increased from 38% to 67%; and the number of children restrained increased from 57% to 78%. The figure below demonstrates the improvements at each participating church (adult-includes both drivers and passengers combined).



Conclusions:

Results from the program indicate that Hispanic families are capable of changing their safety behaviors and are eager to learn how to keep their families healthy and safe. We believe that education combined with subsidization is the most effective method for altering safety behaviors and increasing restraint use among this high risk group.

Recommendations:

While we have seen marked increases in the use of car passenger safety restraints in the Hispanic populations with whom we have intervened, there is still much work to do, and



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we strongly encourage long-term involvement and commitment from corporate sponsors and government agencies as their support is critical for the continuation of this and other similar programs.