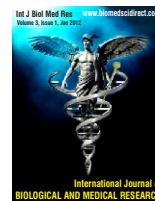


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Original article

The Seat-belt Dilemma: A Qualitative analysis of the reasons for its Use and Non-use

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ABSTRACT

Purpose: Though a significant amount of research throughout the world has been directed towards discovering why seat belts are not used [1-12], no similar study, according to our literature review, has been conducted in Pakistan. The purpose of this study is to find the reasons for the use and non-use of seat belts among young educated male adults of Peshawar (aged 22-25) (only college students have been interviewed in this study). **Methods:** Interviews and focus groups were held at the premises of Peshawar Medical College, the interviewees being students living in various parts of the city. Interviews were recorded in audio and later transcribed and analyzed thematically to inter-connect the reasons with each other and find meaningful patterns. **Results:** Reasons for non-use (categories): Reduced perception of risk at low velocity, Social pressure/peer pressure, Discomfort, Lack of awareness, Unavailability of seat belts. Reasons for use (categories): Personal awareness, Out of habit, Strict rules (especially on motorways), Parental guidance, Increased perception of risk at high speeds (highways). **Conclusions:** In their own words, 'there is no trend of wearing seat-belts here'. There is a need to address the issue of social pressure in order to effectively tackle the issue of safety belt use here, plus there is a definite need for more detailed research here in this area. Also, much more of the population needs to be involved in any future similar study. Educating the public, especially the school going children, is a key step. Effective implementation of strict, unbiased laws is also of key importance.

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1.Introduction:

Seat-belts are installed in vehicles for the safety of the driver and the passengers. Its use varies in different parts of the world due to different reasons. Though a significant amount of research throughout the world has been directed towards discovering why seat belts are not used [1-12], no similar study, according to our literature review, has been conducted in Pakistan. According to a study conducted in New Zealand, the main reasons for not using a seat belt by young adults were forgetfulness/laziness, a perceived low risk of injury, and discomfort [1]. Another study conducted in Canada reports that, "the failure to use seat belts appeared to result primarily from a failure to acquire the habit of buckling up" [2]. Forgetfulness and lack of habit have their own reasons which need

to be explored. While all these reasons might explain the low seat belt use in such countries, they are not sufficient to explain the apparent complete lack of usage here in cities like Peshawar, a city in a country with very high death rates due to road traffic accidents. There is also a need to relate the reasons with the social environment of the people. For instance, a similar study conducted in Canada rationalizes such type of research on the basis of, "a need to explore the thought process underlying the reasons given by the people for using or not using seat belts as this also takes into account the social and personal context of their choices thus providing a broader view of safety belt wearing" [3].

Rationale of the study:

Hence this study aims to explore the thought process underlying the reasons given by the students for using or not using seat belts thus helping in more effectively tackling this issue. Being aware of the lack of any laws in the city necessitating the use of seat-belts, and the incompetence of the Government in implementation

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of law and order in general, it is not surprising to observe low seat belt use here. We felt such study could help in finding ways to improve this situation

2. Objectives:

The purpose of this study is to find the reasons for the use and non-use of seat belts among young male educated adults (aged 22-25) of Peshawar (only college students have been interviewed in this study). It is basically a small scale study which could hopefully provide the necessary background for a study on a greater scale, involving much more of the population. Although the reasons relating to its use are part of the objectives, it is the apparent non-use of safety belts which encouraged us to carry out this study. Also the argument pointing towards the disadvantages of safety belts, although an important one, is a topic which is not part of this study.

3. Methods:

Individual face-to-face interviews and focus-groups were held at the premises of Peshawar Medical College, the interviewees being male students living in various parts of the city. 6 interviews and 3 focus groups were conducted among 4th and final year MBBS students. We selected students of 4th and final year because these were the students with the richest lived experience and it was this experience plus their perceptions regarding their experiences that we wanted to study. Both students who drive and who don't drive were included, they were randomly selected. There was only a single female interviewee who was part of the initial 2 interviews that were used as pilot interviews. Data was collected from a total of 18 students (ages ranging from 22-25) via 6 face to face interviews and 3 focus groups, recorded in audio (after acquiring consent), and later transcribed, analyzed thematically to inter-connect the reasons with each other and find various categories and meaningful patterns. We chose to concentrate more on the focus groups because they create an environment whereby individuals can communicate with each other and hence the resulting discussions are much more useful and carry more quality than a discussion with a single individual.

We tried to create a casual atmosphere during the interviews, by inserting light humor every now and then, so that the students could feel at ease and to avoid creating an unnecessary tense environment. But members of the focus group were always guided back to topic if the discussion strayed too far. An interview would start, after proper introduction and consent, by asking the students how often they used a seat belt. Next, they would be asked about the reasons for not using or using the seat belt; the 'why'. They were encouraged to speculate about the major reason, according to them, among the various reasons and about steps that could be taken to increase the use of seat belts. They were co-operative, much beyond our expectations, and gave well-thought answers.

The audio files were analyzed, by 2 researchers (the principal and co-investigators) instead of a single person, to provide an unbiased analysis of the reasons, initially focusing on the various reasons, categorizing them thematically. In subsequent detailed analysis of the data, focus was shifted towards relating the various reasons of the students with their overall discussion, and relating them with the social environment of the students, which gave us the opportunity to explore the underlying thought process behind the

reasons. The whole data was then scrutinized to acquire a 'big picture' by inter-relating the results. This was important because we suspected the reasons given, although apparently similar to those in other parts of the world, would have different thought process involved.

4. Results

The results are presented categorically, according to the various themes that were extracted from the raw data.

4.1. Trustworthiness:

After data collection, the data was analyzed by both the researchers separately to extract themes which were then compared with each other and any dissimilarity was not allowed to enter the results. The results were also subjected to 'member check' after a rough draft of the results containing the proposed themes was built. The draft was emailed to 3 randomly selected members of the interviews and focus groups and their feedback was requested. They expressed their agreement with the proposed results via email.

4.2. Reasons for non-use

4.2.1. Reduced perception of risk at low velocity

Most of the students reported that they did not wear a seat belt in the city. The most dominant reason, according to them, apparently was reduced perception of risk due to relatively low speeds and short distances to cover. They felt that a road traffic accident at such low velocities would not bring about enough impact on them as to require the use of a safety belt. A student explained that "people really don't feel the need to wear a seat belt in the city when mostly they will be travelling at 15km/h to 20km/h...very rarely they might have a chance of reaching 35km/h to 40km/h...the feeling of being un-safe just doesn't kick-in at such speeds...It's not until one reaches relatively higher speeds on the highways that the sense of being un-safe or at danger, starts to form in our mind".

4.2.2. Social pressure/peer pressure

When probed further, more than 90% of the students said that social pressure/peer pressure (feeling awkward being the only one on the road wearing a seat-belt) was also a major reason contributing towards their lack of seat belt use. On being asked why people here don't wear seat belts, a student pointed out, and others promptly agreed, that "a major factor is that the person is aware that people are looking at him with mocking eyes...If a single person is wearing it, he looks awkward, out of place, the odd one out, being the only one with a seat belt on". Another student in the focus group tried to elaborate with an example that "lets say Dr.xyz was to approach the college's parking lot wearing a seat belt, most of us, including me, are going to say, 'look at him trying to look like he has lived mostly abroad and trying to show off and look like an Angraiz (English)'....such is the kind of thinking that exist around us here in our community'. Another student in the focus group gains some confidence to disclose that, "in fact just the other day, I made fun of a person who was driving on one of the busier local roads at about 20km/h or 30km/h, 'look at him, he looks like a scared old lady afraid he is going to hit something and die at this speed', I pointed my friend's attention to the person".

Finding the opportunity to explain more clearly why he didn't wear a seat belt, a student confessed, "so due to all this, now I feel very awkward wearing it especially in a place where the people might know me, fearing they will make fun of me...because that is exactly what I would do if I were in their place...they would think I'm showing off because I have a nice car or that I'm trying to copy the rich and pompous...because that is what the general perception over here is...we associate seat belts with the rich and well-off...a well respected middle-class man wouldn't like to be called as someone trying to copy them".

"Once I offered a lift to a local laborer...I was wearing my seat belt...the laborer looked confused, asking me whether I lived somewhere abroad", a student tried to explain by example how, to the common man, the seat belt is an alien object, thinking it is something used by the Europeans, or the Americans, or members of some other developed nation. A student supported the discussion by trying to mathematically assess the situation, "I would say that 70% to 80% of our people feel shy while wearing it", he was quickly backed up by the unanimous agreement of the whole focus group. One of the students commented, with concern, that in fact this is, "a major issue...because of this social pressure that surrounds us, even the well educated and well aware chunk of the population hesitate to buckle up".

4.2.3.Discomfort

A considerable number of students said that one of the reasons why they wouldn't wear a seat belt was the hassle of frequently buckling and un-buckling while on short trips around the city, which usually requires frequent exits from the vehicle. "I wouldn't wear it because I feel uncomfortable putting it on and off repeatedly, like on a trip to the local market...so the hassle out-weighs the small amount of risk I might be exposed to". Then there was the issue of discomfort caused by the belt itself, as one student puts it, "it makes me feel suffocated wearing that thing across my chest...it restricts my mobility making me feel uneasy".

4.2.4.Lack of awareness

"I remember being on the motorway once in the driving seat along with my family, I was not wearing a seat belt. I had never taken the effort to wear one. On my father's persistence, I tried to buckle up for the first time in my life by bringing the belt on top of me and, not making any sense of how I was supposed to wear it, sandwiched myself and the whole seat between the two arms of the seat belt. It was not until pointed out by my father that I realized this was never meant to be worn like such".

The preceding narrative of a student hints at the serious lack of awareness regarding the seat belt among our population. Another student pointed out that, "most of those who are aware have not yet realized it's importance in safeguarding them...to know and to realize are two different things". Other students agreed that people are not aware of the seat belt's purpose in the car; they don't know how it can save their lives. "I am aware that It is for my safety, but I don't feel at risk, probably because I have never been in a road-traffic accident", one of the students tried to justify his lack of seat belt use. If an accident is what it takes to make people realize the importance of the seat belt, then it is worth mentioning that there

are only a few of us lucky enough to be left in good condition to realize anything after a fatal road-traffic accident. We must find reasons other than this to convince ourselves. The extent of lack of awareness can be judged by the examples that some people will take the effort to bring the seat belt all the way across their chests near the socket, but instead of plugging it in, will hold it in their free hand just so they can avoid the being heavily fined by the motorway police. There couldn't be a better example that pointed towards the desperate need for educating the public properly.

4.2.5.Unavailability of seat belts:

Some of the students rightly pointed towards the fact that more than 95% of our public transport vehicles, on which a major chunk of the population, including students, is dependant, have no seat belts at all. So even with proper awareness, many would still be forced to travel without a seat belt. A student tried to explain that, "there are not enough seats for people on the public transport, let alone having access to a seat belt...most of these vehicles are so overloaded by passengers that it is not a surprise to see half of the passengers standing inside the vehicle, or hanging off the back, or even sitting on top of the vehicle itself". Beside the public transport vehicles, many people having their own cars have no seat belts installed in them, as a student gave his own example, "we have an old car which has no seat belts...so I can't use one".

4.3.Reasons for use:

4.3.1.Personal awareness

A very small minority of the students said that they wear seat belts most of the time, and even fewer students, two to be precise, said that they wear it all the time, regardless of the place or the length of the trip. One among these two students had experienced a pretty serious road traffic accident recently, which caused him to wear a seat belt regularly. And the other one was a female student, who said parental guidance, from a very young age, mostly by her father, was the reason for her exceptional awareness regarding the issue.

4.3.2.Out of habit

For those few students who said they wore a seat belt most of the time, an important factor, according to them, was habit. And for most of them the habit developed unconsciously due to some other reason. "I was always annoyed by the seat belt warning beeps and lights in my car, so I would buckle up just to get rid of these...now when I don't wear a seat belt, I feel sort of incomplete", says one of the students, explaining how, many of those who buckle up, get the habit. Another student explains how his habit developed, "the main reason for my habit was the fact that the air-bag inflation system in our car was connected to the seat belt and would only inflate if the seat belt is worn...it seems I trust the air-bags more than the safety belt".

4.3.3.Motorways vs. Local roads: The power of strict law

If one observes the traffic a few kilometers on either side of the junction between the motorway and the local road here, the difference in terms of seat belt use is immediately obvious. It is like the difference between night and day. What could be the reason for this? Faced with this question, the reply was unanimous and spontaneous, "fear of law". "When people know that in a specific area they are required by law to wear a seat belt and that they will be

strictly checked for it and heavily fined if found breaking the law, they make sure they are wearing a it", one of the students explains. Another student added, "Ye dandai ki qaum hai (it is a country which only understands strictness)...in this country, until and unless there are strict laws, people damn care". Only a few of these students said that the main reason for their seat belt use on the motorway was that their perception of risk was increased due to the relatively high speeds with which one travels on such highways. Meaning they felt more prone to injury at higher travelling speeds. These were the well aware students who knew how seat belts can make them safe.

5. Discussion:

Different nations and cities have their own reasons for the observed usage of seat belts there. The various governments work hard to implement laws and make various efforts to increase its use by drivers and passengers, and these efforts seem to be fruitful in most of the countries like the United States, the United Kingdom, and Europe etc. But here in Pakistan, especially in cities like Peshawar, the situation is, apparently, quite different. Now, it is not a secret that our law and order system is heavily lacking in terms of implementation, but the use of seat belts is an issue that is directly concerned with an individual's life. Which means the people must have good reasons, other than the weak law and order system, for choosing, consciously or unconsciously, to play with their lives.

Before the results are discussed, it is important to note that currently, as we pointed out above, there are no government laws in the city which necessitate the use of seat belts by drivers or passengers. This is important in understanding the results more realistically. This independence of the subjects from law affects the results in various ways and has in this case, helped in our analysis too. It obliterates the problem of differentiating those who wear seat belt for the purpose of safety from those who wear it out of fear of law, thus making it easier to analyze the responses. It also brings into clear focus the issue, that educating the population and spreading awareness is a more efficient and rewarding step than forcing by law. But the importance of law implementation cannot be over-looked either. In fact, both implementation of relevant laws and educating the public go hand in hand.

Having said that, it was not a surprise to find out that majority of the students did not wear a seat belt when not required by law. In fact, the very reason and driving force behind this study was this observation of ours in every part of the city.

5.1. Exploration of the thought process:

5.1.1 Social pressure:

Coming to the discussion of the results, the frequently reason of reduced perception of risk at low driving speeds, although appearing as the main reason for not wearing a seat belt, seemed to be the tip of the iceberg. On exploring the thought process behind this, we observed that the social pressure was looking more like the main motivating factor behind the decision. Evidence to support this also comes from the fact that a huge majority of the students agreed that if there was no strict law on the motorways, they would have never buckled up even at high speeds, just like they almost never do while using the other highways that are not patrolled by the motorway police (the Grand Trunk road etc.). So, if reduced

perception of risk at low speeds was indeed the main reason behind their decision for not wearing a safety belt in the city, there would have been relatively higher use of seat belt on the many other high speed highways which lack strict laws. Indeed, on our repeated detailed analysis of the students' discussions, we observed that in general, the part of their discussions concerning with social pressure receive the most of their focus; meaning they subconsciously put stress on this part of their discussion because they feel it is important. This is also evident by the sheer number of comments that this area of their discussions generated (as can be judged by the results). Coming back to assessing the situation on a macro level, and comparing these results with those of similar studies carried out across the world, the factor of social pressure might be responsible for the differences in these results.

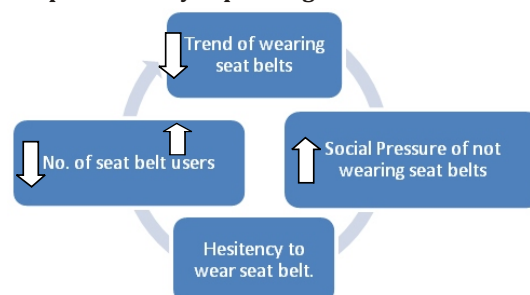
5.1.2 Reduced perception of risk at low speed:

But even though not the major contributing factor, the idea that reduced travelling speeds do not require the use of seat belts was shared by all, regardless of the level of awareness. It was a spontaneous answer by many to the question of why they did not wear a seat belt while travelling in the city. And it would not be unsafe to comment that the immediate thought process behind this reason in their minds was not far from spontaneous. Meaning it is one of those things we do spontaneously, without giving much thought to it. That is why it did not come as a total surprise that not a single student realized that even though they were travelling at low speeds, anything hitting them with a much higher speed (a thrill seeking youngster in a speeding car for instance) could result in an impact with magnitudes much exceeding their expectations, causing serious injuries. Now this is nothing more than simple laws of momentum which all of the students studied in detail in their physics classes, but we never give detailed attention to spontaneous thoughts and decisions. Even a highly educated elderly professor sitting near one of the focus groups argued that as we travel at relatively lower speeds in the city, seat belts are not required.

5.1.3 Proposed theory explaining non use of seat belts:

In one session of our data analysis, we noticed a relationship between "the trend" of not wearing seat belts and social pressure. When people hesitate to use seat belts due to the social pressure around them, this contributes heavily towards promoting the trend of not wearing seat belts, which in turn discourages individuals and they are more hesitant to buckle up. A vicious cycle might be the way to describe this relationship.

Figure : Proposed theory explaining non-use of seat belts.



A successful break, anywhere in the cycle, might be just what is needed to increase the trend of wearing seat belts. But cycles are hard to break; they attain a certain degree of stability when left to exist for longer durations. So this could be a challenge, but still an achievable one.

6. Conclusions and recommendations

There is a need to address the problem of social pressure in order to effectively tackle the issue of safety belt use here. There is a definite need for more detailed research in this area before proceeding towards handling this issue. Also, much more of the population needs to be involved in any future similar study, because there seems to be huge differences in the way different classes of the population perceive this topic.

Shedding light on the topic of awareness, mere information regarding seat belts is not enough, as shown by the discussions of the students. Steps like media campaigns that portray seat belts as something 'cool' and 'fashionable' could be employed to bring about a change in the attitude of the young adults. Educating the public, especially the school going young children (aged 5-11), should be a key step. Children's minds are the most flexible; and this is also an age where bad habits are easy to break.

Strict, unbiased laws that are effectively implemented are also of key importance. The implemented law should not be different from the written law. But again, this should come after the process of educating and spreading awareness among the masses, not before. But also, as pointed out earlier, both of these efforts cannot function properly without the help of the other; they both go hand in hand.

Coming to the reasons given by those students who used seat belts regularly, because of personal awareness; it is of utter importance to focus attention on such individuals and try to grasp the thought process behind their decisions, as this will give us clues to effectively and efficiently handle the situation of the non-use of seat belts.

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