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RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICE ABOUT CAR SEATBELT AMONG DRIVING WOMEN IN SAUDI ARABIA 2019

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Abstract

Background: The purpose of this study is to conduct an assessment of knowledge, attitude and practice of car seatbelt among driving women in Saudi Arabia since women now are allowed to obtain a driving license in Saudi Arabia. The lack of this kind of study which assesses diving women in Saudi we were motivated to conduct this study. We want to know the KAP of female drivers in Saudi Arabia and also the association between the sociodemographic and the KAP regarding car seatbelt.

General objective: To assess Saudi women drivers' knowledge, attitude and practice of using seatbelt while driving.

Methods: A cross sectional study targeting all driving women who will respond self-administered online questionnaire, will be distributed through social media in Saudi Arabia from 12, Jan to 20, Jan ,2019.

Conclusion: The perception of participants about using safety seat belt was 97%, the percentage of using seat belt during driving in city 65% while 81% using seat belt during driving in highway They represent 58% and the second most common restriction of movement represent 29.8most common barrier among driver women is forgetting using seat belt.

Introduction:-

Worldwide the road traffic accidents (RTA) is one of the most frequent cause of all trauma admissions in hospitals.1

The World Health Organization (WHO) showed that 1.24 million people were died on the road, and the injuries from RTA reach up to 50 million people worldwide, and by the year of 2020 it is expected that the number of deaths from road traffic accidents will increase 2.3

The mortality rate from Road traffic in the Kingdom of Saudi Arabia (KSA) accounts for 4.7%

The main transportation way In KSA is motor vehicles. According to the morbidity and mortality records in the Ministry of Health (MOH) hospitals, 20% of beds are taken by RTA injuries, and percentage of death due to RTA in the hospital was 81%.8

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One study showed that in KSA the number of death due to road traffic accidents was 86,000 and injuries were 611,000 with 7% having permanent disabilities.12 anther study calculated by day there is 19 death daily and 4 injured every hourin KSA.Inperiodbetween1997to2002onestudyreportedthata 31.6%increaseindeathsduetoMVAamongmalesin comparedwitha1.3%amongfemales. Another study showed that highspeeds one of the majorcausesofMVA, representing for43.1%(in2010),42% due to improperturning16, and(in2006) percentage of high speed was 29%, breakingregulationslikenotusingseatbeltin26.6%ofaccidents.22

One of the modalities that showed important role in reducing the number of MVA-related injuries and deaths is Wearing seat belts.[8] in December 5, 2000 new law was implanted in Saudi Arabia which was using of seat belts while driving.[9,10]In the first few months after adopted this law, the percentages of seat belt usage in Riyadh were 60% and 22.7%, among drivers and passengers, respectively, comparing to percentage of drivers who use the seat belt before the law was 27.8% and 14.7% by passengers .10

Rational and Significance:
According to previous studies which shows that noncompliance to the traffic rules one of the main reasons of increase rate of death and injuries among drivers in KSA. due to the importance of the knowledge, attitudes, and practice of drivers about traffic regulations have been expected to be key factor in reducing traffic injuries and deaths. By the 10 of October 2018 new rule has been established in Saudi Arabia that Saudi women have their right to drive, to our knowledge there is no published studies in our region to measure attitudes, toward seat belt using among Saudi female drivers and we want to fill this gap and our aim of this study to assess knowledge, attitudes, and practice toward seat belt using. (11).

General Objectives:
To assess Saudi women drivers' knowledge, attitude and practice of using seatbelt while driving.

Specific Objectives:
1-To assess the knowledge about car seatbelt
2-To identify barriers from using car seatbelt

Literature Review:-

(Jawadi. AH, 2017) had studied the prevalence of seat belt use and what are the distracted behaviors during driving among health-care providers in Saudi Arabia and its comparison with non-health-care providers from January 1, 2015, to June 30, 2015.

It was cross sectional study a survey was distributed online A total sample were 345 male drivers from both HCP and non-HCP.Results showed that health care provider more complains to wear the seat belt more than non-health care provider with prevalence of 43% and 13.3% retrospectively. And their explanation of that because health care providers are facing more of trauma victims and death due to road traffic accidents. Also they reported about the barriers of not wearing seat belt, the main reason among health care providers was that it affects their clothing (56.0%), while non-HCPs reported movement restriction as the main reason (63.5%).(4)

Yazan Issa 2015 this study was to assess the factors that may lead to road accidents and to evaluate the effect of personal deriver’s characteristics on road accidents in Tabuk city in Saudi Arabia the questionnaires were distributed in traffic police stations were accidents recorded and, in the hospitals, to injured drivers and the sample size was 90 drivers

Results showed that young drivers (less than 30 years) are more involved in road traffic accidents about 60% with less responsibility while drivers more than 50 years old involved in only 4 percent of accidents. Also the drivers with more period of driving experience like more than 5 years are involved in about 65% of accidents, while drivers less experience are involved in 8% of accidents.

The drivers with highly educational level are more participate in traffic accidents about 47% of them having university level or more. (5)

InShota Ogawa et al (2018) the study done among 1546 pregnant women for assessing the prevalence and affecting factors on using rear set belt in pregnant women, they found that there is no significance decreasing in using rear

seat belt by rear-seat passengers during compared to before pregnancy. Also, there is multiple factors associated with rear seat belt using such as age, knowledge how to use seat belt, compulsory use of rear seat belt.

Yueng-Hsiang Huanga (2010) the study was conducted in five cities in China to assess seatbelt use and to find out Chinese drivers' attitudes toward using seatbelts. It showed that many personal and demographic features other than attitudes are correlated to seatbelt use rates in China. Personal characteristics are important factors that can be used torisetheutilizationofseatbelts amongChinesedrivers.

AliH . HealthAffairs;ChevyChase Vol. 36, Iss. 4, (Apr2017):636-639,Seat-BeltUseInUSCountiesalargetelephonesurveyconducted bycountyandstatehealthdepartmentswithsupportfromtheCDC. 5,6Respondentswereaskedthequestion,"Howoftendoyouuseseatbeltswhenyoudriveorrideinacar?" Femalesreportedhigherseat-beltcompliancethanmales,89.6percent(95%uncertaintyinterval:89.4%-89.8%)versus81.9percent

Methodology:-

1. **Study area/setting:** Kingdom of Saudi arabia
2. **Study design:** cross sectional design
3. **study duration:** 6 weeks
4. **Sample size:** The sample size was calculated based onestimatingtheproportion using the formula

$$N=4\ pq/l^2$$ (Where, p=anticipated proportion, q=1-p, l= allowable precision)

Taking 95% confidence interval, 5% precision and p=80% (based on the study in which about 80% females were reported to be having knowledge regarding seat belt use while driving)[12]it was calculated by using the following site-
http://epitools.ausvet.com.au/content.php?page=1Proportion&Proportion=0.761&Precision=0.05&Conf=0.95&Population=

The required sample size for our study was estimated to be 245.

Population Sample & sampling method:
Population:
all driving women in Saudi Arabia

Sampling method:
convenience sampling

Inclusion criteria:
All driving women who hold a valid driving licence

Exclusion criteria:
Male drivers

Data collection tools:
This study will use self-administered online questionnaire, will be distributed through social media.

Data management and analysis:
Data collection through online electronic questionnaire and the data will be entered in SPSS

Ethical consideration:
Confidential handling and management of the collected data. Names of participants were not askfor. permission was released for quotation from author.

Discussion:-

Motor vehicle accident are a major cause of morbidity and mortality in SaudiArabia; almost one‑third of Ministry of Health hospital bedsare occupied by MVAs at any time.[9] One of the most importantcauses of this serious health endemic is noncompliance toseat belt use.[9] It was found that wearing seat belt is the solepassive preventive

measure to reduce the risk of injury or deathfrom motor vehicle accident.In one study was done in KSA Jawadi, he found he health care providers are more compliance to seat belt compared to non-health care provider.

Globally, injury mortality among men is twice that among women. Insome regions, however, mortality rates for suicide and burns infemales are as high or even higher than in males.

Table 1:- Demographic data.

Demographic data	**Number**	**Percentage**
Number of percipient	**172**	
Age	2	1.2
<18	32	19.2
18-25	85	50.9
26-35	41	24.6
36-45	7	4.2
>45		
Nationality	157	94
Saudi	10	6
Non-saudi		
Marital status	39	23.4
Single	111	66.5
Married	1	0.6
Widow	16	9.6
Divorced		
Number of children	52	31.1
No children	59	35.3
1-2	50	29.9
3-5	6	3.6
>5		
Educational level	0	0
Illiterate	30	18
General education (primary, secondary,tertiary)	137	82

Higher education		

In this study majority of drivers are between age of 18-25, the number of a single women drivers are greater among singleAnother study was done in KSA. Tabouk city Effect of driver's personal characteristics on traffic accidents the findings have shown the variables that had significant relationships with accidents in the city and those that did not have significance. Among the significant variables was age of the driver and his educational level. It appears that young drivers are highly participating in traffic accidents with less responsibility. The responsibility of accidents decreases with the high educated drivers. The previous study is actually focus on one city of KSA While in this study many cities are involved in the study and other factors or determinants not mentioned in the previous study.

Table 2:- Regional Distribution.

Region	Number of percipient	Percentage
Riyadh	40	27.2
Makkah	8	5.4
Al-madinah	4	2.7
Eastern region	4	2.7
Jazan	64	43.5
Aseer	17	11.6
Al-qaseem	2	1.4
Tabuk	0	0
Hail	2	1.4
Najran	0	0
aljowf	2	1.4
Albaha	0	0
Northern border	4	2.7

Figure 1:- Region of distribution.

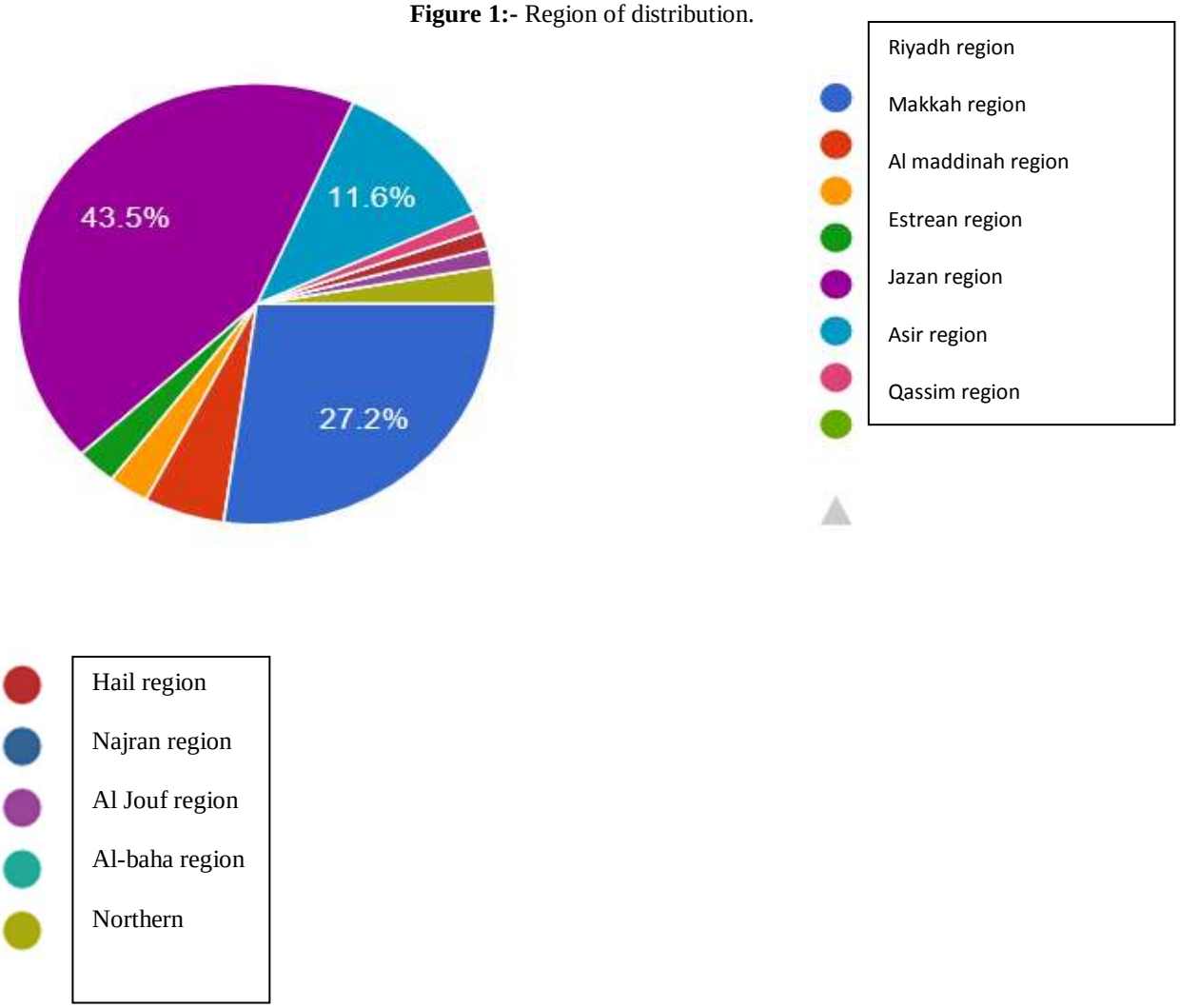


Figure 2:- Women driver perception about using safety seatbelt.

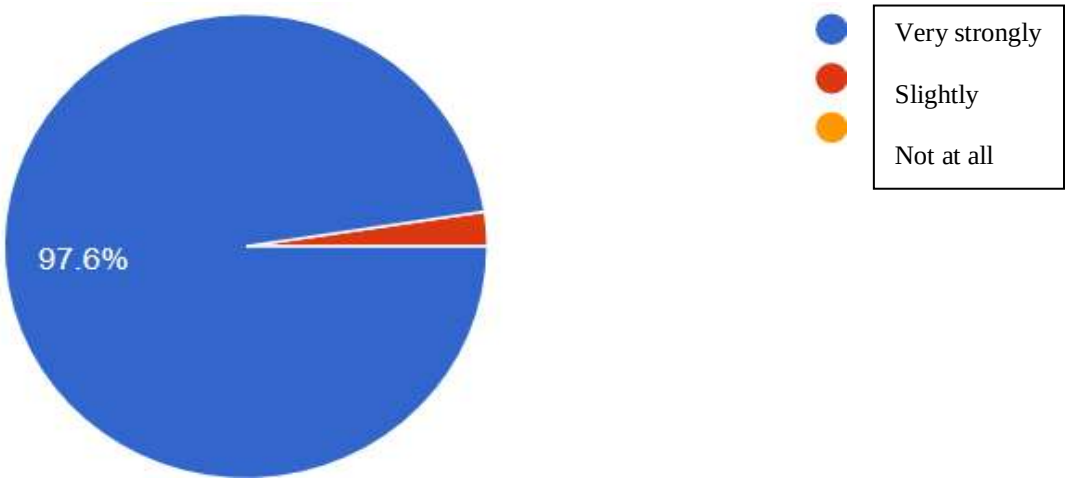


Figure 3: - Women driver using seatbelt inside city

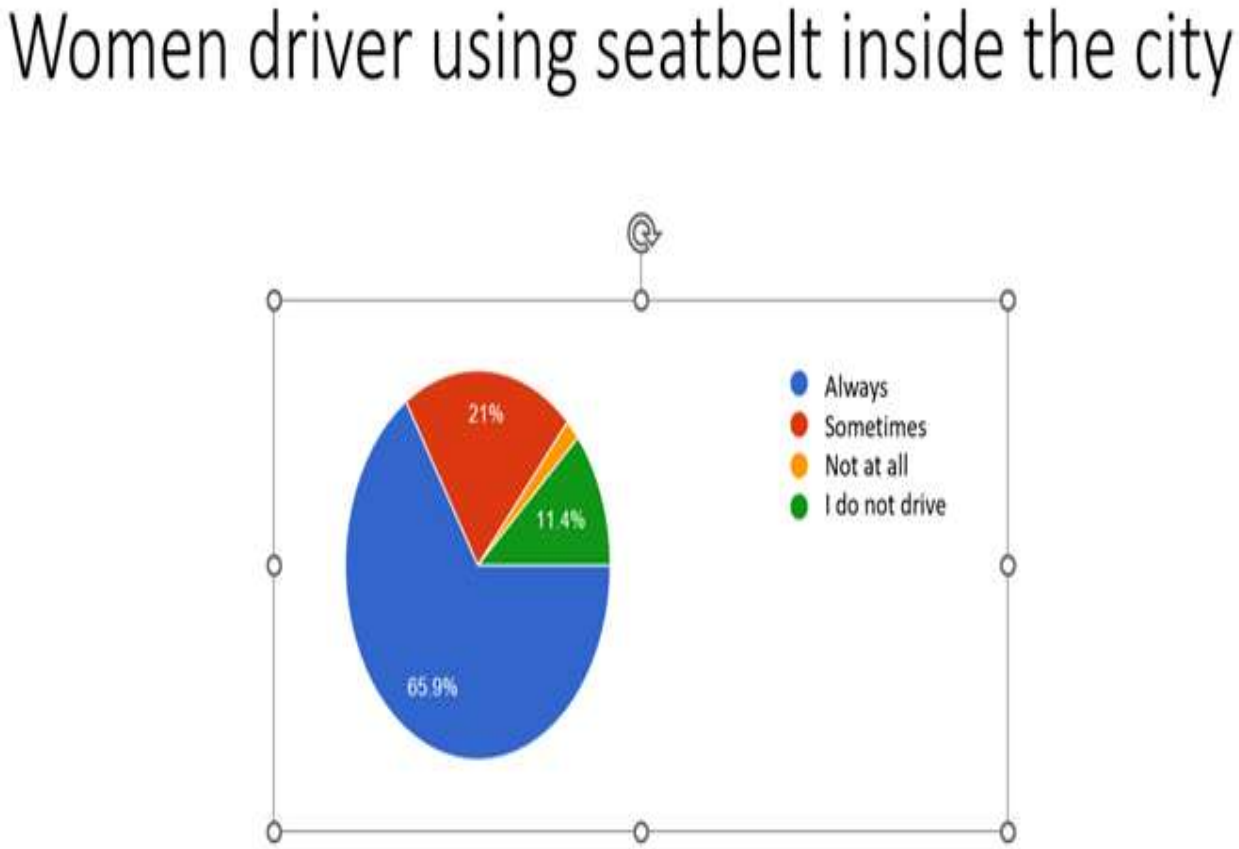
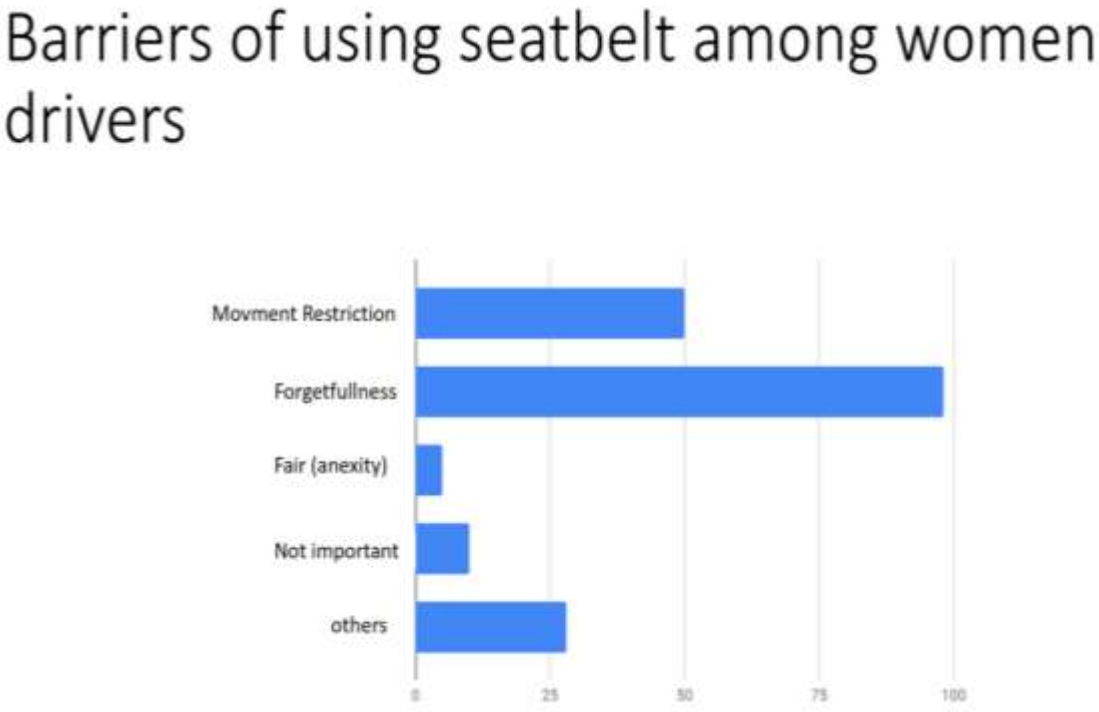


Figure 4:- Barriers of using seatbelt among women drivers.



Conclusion:-

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