Reviewer's report

Title: Drinking and driving and non-seat belt use among Thai drivers during Songkran festival

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Reviewer: Bundit Sornpaisarn

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The significance of this study is that there have been double of traffic accident deaths (about 80 deaths per day) during Songkran festival compared to the average number of the whole year (about 40 deaths per day) so that the intervention that could reduce these deaths would be valuable.

The comments have been divided into three parts as suggested.

Major compulsory revisions

• In appropriate interpretation:

This study employed a cross-sectional survey which the authors also mentioned that it could not summarize the causality between predictors and outcomes; however, the authors tended to conclude that Road Traffic Injuries (RTI) campaign seems to have an effect on reducing drinking and driving and non-seatbelt use among drivers during the Songkran festival. Driver personality may be a confounder. Ones who exposed to various RTI intervention measures may be the ones who are precautionous drivers who are more interested in exposing to RTI interventions and do less drinking and driving (DD) and non-seatbelt use (NSU).

The authors should say that this study aimed to assess the association rather than the impact of RTI interventions on DD and NSU during Songkran.

The authors’ conclusion that rates of DD (10.6%) and NSU (28.4%) seemed to be moderate might be able to lead the reader misunderstanding. The term used leads to conclude that this is the rates of all drivers meaning it is not a big problem for Thailand. In fact, this study selectively chose to study on car/bus/truck rather than motorcycle which causes more problems of RTI especially during Songkran festival.

The authors should explain a reason why they were interested in studying on car/bus/truck rather than motorcycle. In addition, the authors should suggest in the article that studying this kind of study focusing on motorcycle riders is interesting for the future study.

• Methodology

The authors should clarify more on whether the samples can be representative of the gas station population or not in other word the author should describe a potential of selection bias for gas station sample selection: how provinces
chosen, how well of the gas station sampling frame, for example.

One limitation the author should describe is non-respondents may be bias samples who were more likely to be drunk-drivers.

Minor essential revisions

• Rationale of the study
The authors should justify the significant of the study by demonstrating statistical data showing the signification of RTI during Songkran festival rather than only claiming that the government did a big RTI prevention campaign for years.

• Consistent use and clarification of terminology
The authors should consistently use of the term non-seatbelt use. The authors should define when using RTI, UOR and AOR at the first place. The authors may find a shorter and clearly phase for ‘not having intention not to drink and drive’, for example ‘no intention to drive soberly’. The authors should consider the alternative term for ‘earlier/later check time in the day’. For example, the term ‘driving at night’ (surrogate by ‘later check time in the day’) may make more sense.

• Clarity of table
If the authors, through table, want to describe DD and NSU totally separated, they should separate them into two tables. If the authors want to put them together, the authors should compare and contrast them which are valuable.

One variable in table 2 showing opposite directions of meaning, between DD and NSU, confuses the reader: ‘Has been drinking and driving before/used a seatbelt before’. The other variable ‘Intended not to drink and drive/intended to use a seatbelt’ are in the same direction which is easier to understand.

Discretionary revisions

• Optional alternative interesting points
Since a significant problem of this study is causality interpretation so that the conclusion can be only RTI campaign was associated with low rate of DD and NSU, some interesting analytical points which will be able to contribute more practical implication for Thailand may be as follows.

• Comparing and contrasting between DD drivers and NSU drivers to see whether they are the same group of people, whether they have similar predictors, whether they have similar responses to RTI intervention, in order to suggest the government considering whether to design combine or separate intervention for them.

• Comparing two different driving behaviors regarding to alcohol consumption during Songkran festival. Since (1) driving behaviors on the highway during the beginning and the end of Songkran festival and (2) driving on the road in town or out of town during the mid of Songkran festival may be different because the later involves more drinking behaviors during Songkran celebration at hometown while the former involves less drinking behaviors because it is the time to travelling back to hometown and re-back to work in Bangkok. Moreover, the authors may
find an interaction between RTI campaign and these two driving behaviors: alcohol consumption during Songkran celebration at hometown may reduce the effect of RTI campaign.

Comparing between truck drivers and non-truck drivers because these two driver categories may have different personalities associating to interests in RTI intervention exposure, DD and NSU behaviors.

The strange finding that drivers who experienced caught due to DD and who perceived higher risk to be caught were more likely to behave DD and NSU can be explained by personality difference between two groups: experienced DD drivers and non-experienced DD drivers. RTI campaign may be interested by and have an effect on non-experienced DD drivers while RTI campaign may not be interested by and DD catch (with little punishment) may not have an effect on experience DD drivers. Hence, analysis comparing between different driver personalities (truck versus non-truck driver) may be useful.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.