# PEER REVIEW HISTORY

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#### ARTICLE DETAILS

TITLE (PROVISIONAL)	Drowning mortality by intent: a population-based cross-sectional
	study of 32 OECD countries, 2012–2014
AUTHORS	Hsieh, Wanhua; Wang, Chien-Hsing; Lu, Tsung-Hsueh

### **VERSION 1 – REVIEW**

REVIEWER	Laura Rosella
	University of Toronto, Canada
REVIEW RETURNED	03-Feb-2018

GENERAL COMMENTS	The objective of this study is to compare the prevalence and
	rankings of intent specific versus all-intents-combined drowning
	mortality among 32 OECD countries. Drowning is often avoidable
	and thus represents an avoidable cause of death using publicly
	available data collected by the World Health Organization. The
	authors claim that no such study using the intent-specific versus all-
	intents combined has been done for mortality. My review found
	some country-specific but none comparing across counties as was
	done in this study thus supporting the value of the study. There are
	some methodological questions and clarifications to address as
	important questions regarding interpretation:
	1. In the objective of the study, it would be most helpful if the time
	period of study was clearly. In addition, the mortality rates and
	rankings were the focus, not solely rankings. Both pieces of
	information are useful.
	2. Further detail in the methods would be important to include,
	including where the numerators and denominators are coming from
	– or if only the rates were averaged (versus combining numerators
	and denominators for 3 years).
	3. Line 34 p. 6 – This sentence is unclear "We first computed the
	proportion of each intent for each country. We then calculated the
	undetermined intent/intentional self-harm ratio and all-intents-
	combined unintentional intent ratio for each country." Is it the
	proportion all drowning deaths? I It should be explicit. We should be
	able to re-calculate the exact same way given the description
	provided.
	4. "Age adjusted" should be written as age-standardized.
	5. My main concern with the interpretation of this study is the wide
	range of unintentional drowning mortality (i.er. nearly 100% in Chile).
	This likely reflects reporting practices (e.g. they classify intent
	differently and are very unlikely to classify intentional) versus true
	differences in intent. The authors should discuss this but this
	difference is far more likely and should be more prominent in the
	discussion versus discussing how this data can be used to inform
	action in response to the country variation.
	6. I would like to see an analysis of ranking within broader grouping
	of counties – perhaps by world region or other – to try and better
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	understanding intent-specific coding practices and try to account for those in the comparisons.
REVIEWER	Mohammad Jahangir Hossain
	International Drowning Research Centre Bangladesh of Centre for
	Injury Prevention and Research, Bangladesh (CIPRB), Bangladesh.
REVIEW RETURNED	10-Feb-2018
GENERAL COMMENTS	1. In the study setting it is mentioned that 32 OECD countries but on
	the title mentioned about international comparison. Suggested for
	revision of the topic.
	2. In the discussion sections, is it really needed to discuss the last
	paragraph?
	3. The conclusion section is needed to be re-written, specially the
	last line

# VERSION 1 – AUTHOR RESPONSE

Reviewers' Comments to Author: Reviewer: 1 Reviewer Name: Laura Rosella Institution and Country: University of Toronto, Canada Competing Interests: None declared.

The objective of this study is to compare the prevalence and rankings of intent specific versus allintents-combined drowning mortality among 32 OECD countries. Drowning is often avoidable and thus represents an avoidable cause of death using publicly available data collected by the World Health Organization. The authors claim that no such study using the intent-specific versus all-intents combined has been done for mortality. My review found some country-specific but none comparing across counties as was done in this study thus supporting the value of the study. There are some methodological questions and clarifications to address as important questions regarding interpretation:

1. In the objective of the study, it would be most helpful if the time period of study was clearly. In addition, the mortality rates and rankings were the focus, not solely rankings. Both pieces of information are useful.

REPONSE: We have added the time period of study in the title and the objective. We have emphasized both mortality rate and proportion in the revised manuscript. We did not emphasize rankings in the revised manuscript.

2. Further detail in the methods would be important to include, including where the numerators and denominators are coming from – or if only the rates were averaged (versus combining numerators and denominators for 3 years).

REPONSE: We have expanded the methods section in the revised manuscript.

3. Line 34 p. 6 – This sentence is unclear "We first computed the proportion of each intent for each country. We then calculated the undetermined intent/intentional self-harm ratio and all-intents-combined unintentional intent ratio for each country." Is it the proportion all drowning deaths? I It should be explicit. We should be able to re-calculate the exact same way given the description provided.

REPONSE: We have rephrased the description of how we calculated different indicators.

5. "Age adjusted" should be written as age-standardized.

REPONSE: Revised accordingly

6. My main concern with the interpretation of this study is the wide range of unintentional drowning mortality (i.e. nearly 100% in Chile). This likely reflects reporting practices (e.g. they classify intent differently and are very unlikely to classify intentional) versus true differences in intent. The authors should discuss this but this difference is far more likely and should be more prominent in the discussion versus discussing how this data can be used to inform action in response to the country variation.

REPONSE: Most of our discussion are concerning the variations in reporting practices across countries. We have deleted the last paragraph on the environmental interventions.

7. I would like to see an analysis of ranking within broader grouping of counties – perhaps by world region or other – to try and better understanding intent-specific coding practices and try to account for those in the comparisons.

REPONSE: We have grouped the countries by region in Table 1 as you suggested and saw interesting findings. Four out of five Central Europe countries had higher undetermined intent/ intentional self-harm ratio. On the other hand, of 11 countries with all-intents-combined/unintentional intent ratio larger than 2, 8 of them were in Western Europe countries.

Reviewer: 2

Reviewer Name: Mohammad Jahangir Hossain Institution and Country: International Drowning Research Centre Bangladesh of Centre for Injury Prevention and Research, Bangladesh (CIPRB), Bangladesh.

Competing Interests: None declared

1. In the study setting it is mentioned that 32 OECD countries but on the title mentioned about international comparison. Suggested for revision of the topic. REPONSE: Revised accordingly

2. In the discussion sections, is it really needed to discuss the last paragraph? REPONSE: We have deleted the last paragraph in the revised manuscript.

3. The conclusion section is needed to be re-written, specially the last line REPONSE: Revised accordingly

FORMATTING AMENDMENTS (if any)

Required amendments will be listed here; please include these changes in your revised version: - Kindly re-upload FIGURES with at least 300 dpi resolution. REPONSE: We have re-uploaded the figures with 500 dpi resolution.

## VERSION 2 – REVIEW

REVIEWER	Laura Rosella
	University of Toronto
REVIEW RETURNED	12-Apr-2018

GENERAL COMMENTS	Thank you for addressing my previous concerns. There are some grammatical corrections remaining. For example "number of
	population" is not grammatically correct.