

---

**WONCA APRC 2019 Abstract ID:10542-->Dr. Chun Wah Michael Tam**

---

**WONCA Asia Pacific Regional Conference 2019** <woncaaprc2019@c-linkage.co.jp>  
To: Michael Tam <m.tam@unsw.edu.au>

29 January 2019 at 11:15

Dear Dr. Chun Wah Michael Tam

+-----+  
WONCA Asia Pacific Regional Conference 2019  
+-----+

Thank you for submitting your abstract to WONCA Asia Pacific Regional Conference 2019.  
If you need to edit your abstract, please login to the "Edit Page".  
You will be asked to enter your Abstract ID and E-mail address.

Edit Page: <https://reg.c-linkage.co.jp/woncaaprc2019/abstract-edit.php>

## ■Abstract Information

=====  
Abstract ID 10542  
=====

----- [ Name ] -----

[Name] Dr. Chun Wah Michael Tam

[Presenter] ●

[Date of Birth] 1978 / 8 / 30

----- [ Affiliation 1 ] -----

[Affiliation Name] South Western Sydney Local Health District

[Division/Department] Academic Primary and Integrated Care Unit

[Affiliation No.] 1,2,3

----- [ Mailing Address ] -----

[Home or Office] Home

[Address] PO Box K786

[City/State] Haymarket, NSW

[Zip Code] 1240

[Country] Australia

[TEL] +61412704158

[FAX] +

[E-mail] [m.tam@unsw.edu.au](mailto:m.tam@unsw.edu.au)

----- [ Category ] -----

[Session Category] Free Paper

[Type of presentation] Oral

[Topics] 7. Education

----- [ Abstract ] -----

[Abstract Title]

How we (mis)conceptualise p-values (and what we can do about it)

[Abstract Text]

Objectives

Researchers and clinicians have been criticised for frequently misinterpreting and misusing p-values. P-values are often misinterpreted as providing far stronger evidence than is actually the case, which not only has harmful impacts on the understanding of medical research, but potentially on the delivery of patient care.

This study sought to describe and categorise what and how experienced clinicians (in this case, Australian and New Zealand GPs) conceptualised p-values presented in the manner that it is typically encountered in a medical publication. These results may help inform how to provide targeted statistics education to clinicians.

Method

This mixed methods study used quantitative and qualitative questions embedded in an online questionnaire, delivered through an Australian and New Zealand Facebook group (GPs Down Under) in 2017. It included questions that elaborated the participant’s conceptualisation of “p = 0.05” within a scenario, and tested their p-value interpretation ability and confidence.

Results

Participant conceptualisations of p-values were described by six thematic categories. The most common (and erroneous) conceptualisation was that p-values numerically indicated a “real-world probability”. No demographic factor, including research experience, seemed associated with better interpretation ability. A confidence-ability gap was detected.

Conclusion

P-value misunderstanding is pervasive and might be influenced by a few central misconceptions. Statistics education for clinicians should consider explicitly addressing the most common misconceptions.

[Conflict of Interest] No

----- [ Affiliations ] -----

- 2.School of Public Health and Community Medicine, UNSW Sydney
- 3.Ingham Institute of Applied Medical Research
- 4.University of Wollongong
- 5.Monash University
- 6.Bond University

----- [ Authors ] -----

[Author 2] Abeer Khan  
[Affiliation No.] 2  
[Presenter]

[Author 3] Andrew Knight  
[Affiliation No.] 1,2,3  
[Presenter]

[Author 4] Joel Rhee  
[Affiliation No.] 4  
[Presenter]

[Author 5] Karen Price  
[Affiliation No.] 5  
[Presenter]

[Author 6] Katrina McLean  
[Affiliation No.] 6  
[Presenter]

Should you have any concerns or questions, please contact Conference Secretariat.

WONCA Asia Pacific Regional Conference 2019  
< <http://www.c-linkage.co.jp/woncaaprc2019kyoto/> >

////////////////////  
 Conference Secretariat  
 c/o CONVENTION LINKAGE, INC.  
 634 Shichikannon-cho, Karasuma-dori Rokkaku-sagaru,  
 Nakagyo-ku, Kyoto, 604-8162, Japan  
 Tel: +81-75-231-6357 Fax: +81-75-231-6354  
 E-mail: [woncaaprc2019@c-linkage.co.jp](mailto:woncaaprc2019@c-linkage.co.jp)  
 //////////////////////