

Calculating incidence and prognosis in a prospective study

Sir,

This is in reference to the article, "Acute kidney injury (AKI)-incidence, prognostic factors, and outcome of patients in an Intensive Care Unit in a tertiary center: A prospective observational study."^[1]

The authors have done a commendable job to find the incidence, prognostic factors, and outcome of patients with AKI. However, I have a few concerns regarding the type of study and methodology being adopted in the present study.

First, the authors have written in their material and methods that the study done was a prospective, observational, and cross-sectional study conducted in the hospital.

The epidemiologic studies are either descriptive or analytical studies. Descriptive studies include case reports, case series reports, cross-sectional studies, surveillance studies, and ecological studies, whereas analytical studies are either experimental or observational. A prospective study is a type of observational study.^[2]

Hence, how can a study be "cross-sectional, that is descriptive" and "prospective" at the same time? The aim of this study is to analyze the incidence, prognostic factors, and 28 days outcome of AKI. Hence, this is a "prospective cohort" study. The cross-sectional study tells about the characteristics of a population at one point in time (like a photo "snapshot") and is used to estimate the prevalence (not incidence) of a health condition or prevalence of a behavior, risk factor, or potential for disease.^[2]

Further, the authors have provided the incidence of AKI in critically ill patients during the study period of 6 months as 16.1% (as a percentage), whereas incidence being a rate, should have been quoted just as 16.1/1000 Intensive Care Unit admissions and not as a

percentage. Incidence rate refers during a given time period in a specified population at risk. The measure most often used is person years and not percentage.^[3]

Finally, prognosis can be expressed either in term of deaths from the disease or in terms of survivors with the disease. In describing survival after diagnosis of AKI, it must have been more useful to present incidence data in a plot of cumulative incidence over time, taking into account loss to follow-up, using a Kaplan–Meier plot.^[4]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Kanica Kaushal

Department of Community Medicine, Indira Gandhi Medical College, Shimla, Himachal Pradesh, India

Correspondence:

Dr. Kanica Kaushal,
Department of Community Medicine, Indira Gandhi Medical College,
Shimla - 171 001, Himachal Pradesh, India.
E-mail: kanicak8@gmail.com

References

1. Korula S, Balakrishnan S, Sundar S, Paul V, Balagopal A. Acute kidney injury-incidence, prognostic factors, and outcome of patients in

an intensive care unit in a tertiary center: A prospective observational study. *Indian J Crit Care Med* 2016;20:332-6.

2. Descriptive and Analytic Studies. Available from: http://www.ede.gov/globalhealth/fetp/training_modules/19/desc-and-analytic_ppt_final_09252013.pdf. [Last accessed on 2016 Jun 13].
3. Wallace RB. Analysis. *Epidemiology and Public Healthin Maxey Rosenau Last Public Health and Preventive Medicine*. 15th ed. McGraw-Hill Publishers; 2008. p. 19.
4. Kaushal K. Prospective cohort versus retrospective cohort studies to estimate incidence. *Indian J Crit Care Med* 2014;18:828.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijccm.org
	DOI: 10.4103/0972-5229.186267

How to cite this article: Kaushal K. Calculating incidence and prognosis in a prospective study. *Indian J Crit Care Med* 2016;20:434-5.