

# Comparison between Prospective and Cross-sectional Survey

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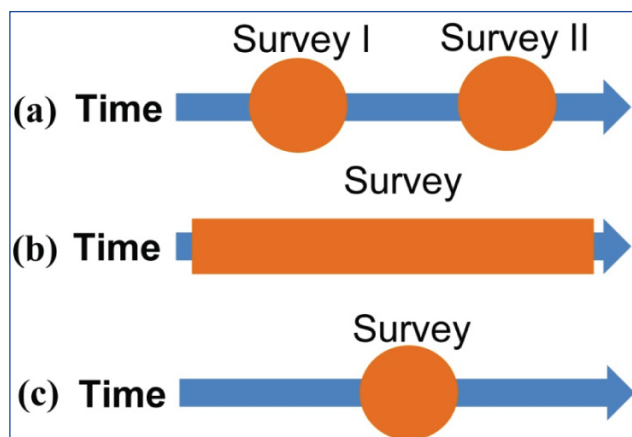
**Keywords:** Awareness, Prospective study, Radiation hazards

Dear Editor,

We read an article in your journal (Volume 6, 2017) contributed by Dasan TA, Koratagere RS and Rngaswamy NB. In the study, authors assessed the level of knowledge and awareness about radiation hazards among non-radiologist doctors [1]. It made us nostalgic about our internship days. During that period, we had to take patients to Radiology Department for investigations. We had to keep the patients stable in X-ray table or hold the child during micturating cystourethrography. Despite knowing the hazards of radiation to some extent, we had to do that.

The result of the study expressed excellently and it influenced us to gather more knowledge about ionizing radiation hazards. According to authors' description, the study was a "prospective study". However, we tried to fit the study in "prospective study" category from different angle but could not do it properly. Hence, we wanted to share our views with journal readers.

The study was conducted from December 2015 to February 2016. Obviously, the study started at one point of time and was carried out during a span of time forward. That might be the reason why authors used the term "prospective". However,



**[Table/Fig-1]:** a), b): Schematic presentation of prospective survey; c): cross-sectional survey.

"prospective study" is the study where investigators take a sample, measure baseline characteristics, predict outcome and follow sample with measurements of the outcome [2]. It is clear that authors did not carry out such type of study.

If they even used the term "prospective survey", that also might not be the appropriate term for their study design. Commonly, the term "prospective survey" is used to describe two types of survey.

First, as shown in [Table/Fig-1a], investigators collected data at one point of time and surveyed the same sample at another point of time [3]. An example in this context: First survey was conducted to assess baseline knowledge and awareness regarding radiation hazard. Then, the sample passed through an academic course about radiation hazard. After that, the second survey was conducted.

In second situation [Table/Fig-1b], researchers took data from a sample of consecutive subjects during a particular span of time [4]. An example in this context: Data collected on knowledge and awareness about ionizing radiation among first year non-radiology postgraduate students for consecutive five years.

In addition, we described a third type of survey in [Table/Fig-1c]. In that case, authors took a sample at a single point of time and conducted a survey. This is commonly designated as "cross-sectional" survey [5]. According to our understanding, that might be the most appropriate term for the study conducted by Dasan TA, Koratagere RS and Rngaswamy NB. Working doctors in a particular hospital is fixed. Merely carrying out a survey during a time span in forward direction is not a "prospective survey". Because, that survey could be done in one day, if manpower was sufficient. In contrast, we cannot carry out survey in a single day in previously described two situations [Table/Fig-1a,1b]. Hence, it could be appropriate to designate the survey as "cross-sectional" or "prospective cross-sectional" where prospective is the term only to denote the time forward.

Hope this brief discussion would help new researchers to

understand difference between prospective and cross-sectional survey.

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### FINANCIAL OR OTHER COMPETING INTERESTS:

None.

Date of Publishing: Oct 01, 2017