

## Practice Surveys: A Way to Gain Insight into the Variations of Medical Practice

Kietpeerakool C, MD<sup>1</sup>

<sup>1</sup> Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

**J Med Assoc Thai 2020;103(Suppl. 7): 1-2**

**Website:** <http://www.jmatonline.com>

Survey research is a unique research method by which information of interest is congregated by sending a subset of sample questions on a specific issue and extrapolating the summarized findings to the target population<sup>(1)</sup>. Surveys are required in studies of health and health services, particularly when inquiring issues involve beliefs, knowledge, attitudes, opinions, perception, satisfaction, or practice variations that may be difficult to address by other approaches<sup>(2)</sup>.

Properly-designed surveys can gather large amounts of data from a large cohort thus representing comprehensive information<sup>(2)</sup>. Survey research is also economical in terms of researcher time, effort, and cost<sup>(2)</sup>. The tools used in the surveys may be postal or online electronic questionnaires, face-to-face interviews, or by telephone interview<sup>(3)</sup>. The survey questionnaires sent via postal, online, or mobile are more private and less intimidating than the interview survey.

The lack of response from intended participants is a major challenge even in the surveys that employ targeted samples<sup>(3,4)</sup>. The characteristics and quantity of non-response to surveys influence the extent to which the findings may be extrapolated. The response rates can vary from as low as 10% to as high as 90% depending on the characteristics of samples and issues being assessed<sup>(4,5)</sup>. It seems unwise to set a cut-off to indicate an acceptable response rate in the surveys as this depends on various factors and the response rates alone do not truly reflect the extent of bias inherent in any survey. However, achieved response rates of more than 65% to 75% are sometimes arbitrarily regarded acceptable<sup>(4)</sup>. In surveys that apply lists of respondents (i.e. the members of an academic institution), it may be technically possible to target every single person in population.

Confidentiality is central to survey research. Survey responses must be kept confidential within a

prerequisite protocol of data protection. Reassuring persons, who are invited to participate in the surveys that the response given will remain confidential, is mandatory. Ensuring the confidentiality of survey data may improve the response rate and alleviate the potential of social desirability bias.

Despite certain advantages of survey research, it is worth bearing in mind its inherent limitations. First, surveys provide 'a snapshot of view' at a specific time. To detect changes over time, a repeated survey within a specified time interval is needed. Second, the survey results are likely to lack details or depth on the issue being assessed thus limiting an assessment of the root causes of the findings. Third, the survey instruments, in general, are specifically developed for the population being assessed, or in other words, the generalizability of the survey results may be limited. Fourth, responses to surveys may not reflect the true beliefs, attitudes, or behaviors of the respondents. Fifth, findings of survey research are vulnerable to various biases i.e. non-response bias, social desirability bias, sampling bias, and recall bias<sup>(3,4,6,7)</sup>.

### **Surveys of practice in the management of gynecologic cancer**

Based on evidence-based practice, management or treatment should rely on scientific information that incorporates the best available evidence from well-designed studies, patient values, and patient preferences. Management of patients with gynecologic cancer is no exception. Although there are several evidence-based information and recommendations developed to convey the standards for gynecologic cancer management, a broad heterogeneity of care exists<sup>(8-10)</sup>.

In the previous practice surveys in the management of gynecologic cancer, the investigators indicated a variety of patterns of practice while also noting room for improvement. Factors affecting the patterns of practice include the characteristics of institutions and health personnel and the availability of resources<sup>(8-10)</sup>.

Practice varies between the different geographical regions. For example, in the analysis of international surveys regarding the practice patterns of surgery for advanced ovarian cancer, there were some practice variations across the

### **Correspondence to:**

Kietpeerakool C.

Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand.

**Phone:** +66-81-5935700, **Fax:** +66-43-348395

**E-mail:** [chumnan@kku.ac.th](mailto:chumnan@kku.ac.th)

**How to cite this article:** Kietpeerakool C. Practice Surveys: A Way to Gain Insight into the Variations of Medical Practice. J Med Assoc Thai 2020;103(Suppl7): 1-2.

countries. Neoadjuvant chemotherapy for advanced-stage ovarian cancer was preferred in Europe over the USA. The positive expectation of pre-operative determination of optimal cytoreduction for advanced-stage ovarian cancer was higher in Europe than in the USA. Also, European surgeons reported a higher response rate of performing diaphragmatic stripping and resection than those from the USA<sup>(8)</sup>.

Practice variation exists even within a setting in which standard management has been set up. In a survey conducted in Spain to determine the practice of gynecologic oncologists in the management of endometrial cancer, there was a broad heterogeneity of care giving between the national and international guidelines and the actual practice. Deviations from the guidelines were mainly noted in the management of intermediate-risk endometrial cancer and post-treatment surveillance. The appropriate treatment, according to the European Society of Gynaecologic Oncology (ESGO) guidelines, was significantly affected by the type of hospitals. The authors proposed that lack of facilities in low case, load settings, and disagreement or unawareness of the current evidence may be the causes of inappropriate management<sup>(9)</sup>.

Interestingly, a wide variation of care exists even within a group of experienced gynecologists working at academic or university hospitals. In the recent survey conducted by ESGO to assess the management of early-stage cervical cancer, areas of major discrepancies were the radicality of surgery in stage T1a disease, management of stage T1b2 disease without suspected lymph node metastasis, management among the patients who were found to have intra-operatively detected lymph node metastasis, and management of stage T1b2 disease without lymph node metastasis but encountering other pathological risk factors<sup>(10)</sup>.

As mentioned earlier, there are certain limitations secondary to the nature of survey research of which we must take into account when interpreting the survey results. A limitation of an extrapolation of survey results to settings with different contextual backgrounds is of major concern.

Based on the examples of previous surveys described above, variations of practice in the management of gynecologic cancer among Thai gynecologic oncologists are anticipated. To gain insight into the variations of practice, a well-prepared survey is required. A survey that targets all Thai gynecologic oncologists can depict the practice landscape on the national scale. In practices observed in the survey that

are considered unmet the standards should be explored in detail by the responsible sectors to enhance the quality of service and to ultimate patients' outcomes.

### Potential conflicts of interest

The author declare no conflicts of interest.

### References

1. Bennett C, Khangura S, Brehaut JC, Graham ID, Moher D, Potter BK, et al. Reporting guidelines for survey research: an analysis of published guidance and reporting practices. *PLoS Med* 2010;8:e1001069.
2. Jones TL, Baxter MA, Khanduja V. A quick guide to survey research. *Ann R Coll Surg Engl* 2013;95:5-7.
3. Kelley K, Clark B, Brown V, Sitzia J. Good practice in the conduct and reporting of survey research. *Int J Qual Health Care* 2003;15:261-6.
4. Kennedy JM, Vargus B. Challenges in survey research and their implications for philanthropic studies research. *Nonprofit Volunt Sect Q* 2001;30:483-94.
5. Galea S, Tracy M. Participation rates in epidemiologic studies. *Ann Epidemiol* 2007;17:643-53.
6. Hebert JR, Clemow L, Pbert L, Ockene IS, Ockene JK. Social desirability bias in dietary self-report may compromise the validity of dietary intake measures. *Int J Epidemiol* 1995;24:389-98.
7. Cheung KL, Ten Klooster PM, Smit C, de Vries H, Pieterse ME. The impact of non-response bias due to sampling in public health studies: A comparison of voluntary versus mandatory recruitment in a Dutch national survey on adolescent health. *BMC Public Health* 2017;17:276-4189.
8. Park SJ, Kim J, Kim SN, Lee EJ, Oh S, Seol A, et al. Practice patterns of surgery for advanced ovarian cancer: analysis from international surveys. *Jpn J Clin Oncol* 2019;49:137-45.
9. Zapardiel I, Blancafort C, Cibula D, Jaunarena I, Gorostidi M, Gil-Moreno A, et al. Utility and actual use of European and Spanish guidelines on the management of endometrial cancer among gynecologic oncologists in Spain. *Int J Gynecol Cancer* 2017;27:1293-7.
10. Dostalek L, Avall-Lundqvist E, Creutzberg CL, Kurdiani D, Ponce J, Dostalkova I, et al. ESGO Survey on current practice in the management of cervical cancer. *Int J Gynecol Cancer* 2018;28:1226-31.