

Andreeva, T. (2012). Surveys used to assess the population health and to inform healthy public policy: challenges for research in poor countries. [Editorial note]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 1-4.

Surveys used to assess the population health and to inform healthy public policy: challenges for research in poor countries

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Опросы, проводимые для оценки состояния здоровья населения и для информирования политики здравоохранения: проблемы исследований в бедных странах

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УДК 303.62:614](100-773)

Редакционная статья привлекает внимание читателя к тем проблемам проведения опросов и использования их результатов, которые являются типичными для бедных стран, и приглашает к обсуждению путей решения. Перечислены наиболее частые проблемы при проведении опросов, которые затрудняют сбор надежных данных: несопоставимость задаваемых вопросов, проблемы интерпретации сведений, сообщаемых респондентами, использование разных подходов к построению выборки в сравнимых опросах, интерпретация лонгитюдных данных. Обсуждается проблема преимущественно дескриптивного представления результатов опросов и необходимости применения аналитических дизайнов, а также рассмотрения результатов опросов как элемента эпиднадзора, с точки зрения международных агентств, которые иницируют опросы, и как лучших имеющих в стране исследовательских данных, с точки зрения местных исследователей. Также привлекается внимание к сложностям информи-

рования политических решений, которые связаны, с одной стороны, с неготовностью политиков пользоваться результатами исследований, с другой стороны, с неготовностью исследователей предоставить надежные результаты, касающиеся эффективных решений, в силу ограниченности дизайнов проводимых исследований. Предложено рассматривать данный журнал как форум для представления результатов аналитических работ по данным опросов и как инструмент повышения качества проводимых в бедных странах исследований.

КЛЮЧЕВЫЕ СЛОВА: опросы; эпиднадзор; страны низкого и среднего уровней доходов; дескриптивные (описательные) результаты; аналитические исследования; сообщаемые респондентом сведения; информирование политических решений; здоровая социальная политика; дизайн исследования.

KEY WORDS: surveys; surveillance; low and middle income countries; LMIC; descriptive results; analytic studies; self-reported data; informing policy decisions; healthy public policy; study design.

In this editorial note, I would like to attract the readers' attention to the particular challenges researchers in poor countries face as reflected in the results of population surveys in these countries and illustrated by the papers in this issue. I also hope to invite the readers to the debate about the possible solutions for these typical problems and to share my understanding of the input that TCPHEE journal intends to make in order to overcome the 'social disparity gap' between public health researchers in rich and poor countries. In addressing these issues I face the dilemma of choosing between too much explanation for the advanced researchers

and too little for the novice ones, but I hope that headings will help the reader to decide where to read and what to skip.

PAPERS IN THIS ISSUE OF THE TCPHEE

This issue of 'Tobacco Control and Public Health in Eastern Europe' is devoted to health surveys. The issue is opened with a lecture by David L. Nordstrom for the novice researchers, which overviews crucial issues of survey use (Nordstrom, 2012). This introduction is followed with five examples of

studies based on population surveys from three low and middle income countries (LMIC).

As our publication name anticipates, three first studies are related to tobacco use. These are from Belarus (K. Krasovsky, 2012), India (Desai, Gharat, Nayak, Patel, & Bansal, 2012), and Ukraine (Kvasha, 2012). The latter study is accompanied with an editorial commentary (K. S. Krasovsky, 2012).

Two further studies are based on surveys conducted in Ukraine. The first of them derives from a representative survey of adolescents and analyzes family-related correlates

of alcohol use (Iakunchykova & Andreeva, 2012). Another study regards men who have sex with men as a major high-risk group for HIV (Klymenko & Andreeva, 2012).

CHALLENGES

As for many public health studies in LMIC population surveys are the only affordable means of data collection, we planned this issue as a platform for researchers from such countries to share experience of using survey data to achieve their goals. When better policies are advocated based on the evidence obtained from surveys, it is worth considering how they could be planned, conducted, and analyzed most efficiently. Major flaws which impede collecting reliable evidence are discussed or mentioned below. Many of them have developmental nature and hopefully can be overcome sooner if researchers are well aware of them and targeted effort is provided.

It is quite common in LMIC that researchers develop a questionnaire especially for the survey to be conducted and this limits further comparison within and across countries.

Another challenge faced by 'survey scientists' is related to the validity of self-reported data. Part of the data will not be valid due to limited knowledge of respondents. Another part of diminished validity may derive from the perception of health-related behaviors in question as more or less socially acceptable.

Sampling frame issues may be reflected in different results of studies conducted within populations with different age limits or place of living.

When repeated cross-sectional surveys are conducted data analysis requires distinguishing between developmental (age), historical (pe-

riod), and cohort effects. Without taking this into account a researcher easily gets biased results.

These challenges illustrated by the studies presented in the current issue may be supplemented by many others and can be discussed in more detail. International context of surveys in a particular country is a more important focus here.

DESCRIPTIVE OR ANALYTIC OUTCOMES OF A SURVEY

Quite frequently a survey conducted with international funding and usually within a cross-country project is the only source of data on a certain topic in a particular country. International donors usually complete their work with publishing thick descriptive reports under colorful covers. Quite frequently such reports become an example of results presentation for researchers interested in the issue. Hence, many papers by health researchers from low and middle income countries (including those which most journals typically reject) cover all different aspects of the problem under consideration and show predominantly percentage distributions of all variables in the dataset. However, switching from descriptive studies to analytic ones can be a beneficial step for many authors in the countries of the former Soviet Union and other LMIC.

Another challenge more related to researchers than to surveys, and especially those living in the countries of the former Soviet Union, where science developed for many decades isolated behind the iron curtain, is related to study designs and their proper use. Those readers interested in this topic might find answers to their questions in this issue in the paper by David L Nordstrom, who kindly contributed his knowledge and experience into educating the readers of TCPHEE

(Nordstrom, 2012), and a special collection of papers in our journal devoted to study reporting.

In addition to the above-mentioned challenges related specifically to survey planning and conduct, researchers in poor countries face multiple problems with regard to data analysis. Many researchers in high-income countries are used to rely on a professional statistician. In many LMIC there may be no such professionals at all. Researchers either know how to analyze data themselves or just do not produce any research results. Even if a researcher is skilled enough to analyze the data, there may be no proper software which allows the necessary analysis. Efforts to analyze the data with EpiInfo software, which has rather limited functionality compared to other packages, are presented in a study from India (Desai, et al., 2012). Experience of reviewing papers from LMIC shows that researchers frequently have to rely on free software or basic modules of other statistical packages having thus no opportunity to conduct analysis which is considered conventional for certain study designs.

Due to high subscription fees, many researchers in LMIC do not have proper access to necessary literature. All these factors significantly inhibit relevant research in poor countries.

CHALLENGE OF INFORMING HEALTHY PUBLIC POLICIES

Use of survey results to inform healthy public policies may be a double challenge. On the one hand, a researcher and an advocate faces a question whether the existing policy-makers are informed enough to seek evidence-based advice. Many decisions in low and middle income countries are still opinion-based and it is quite possible that

EDITORIAL

these inefficient decisions contribute to development problems and economic retardation in such countries.

On the other hand, there arises another question whether an appropriate evidence to inform healthy public policy decisions exists or can be feasibly collected. Obviously, the golden standard of studies generating such evidence is randomized controlled trials which can evaluate how the new suggested decision works in an ideal environment (efficacy), in the real world (effectiveness), and whether it saves resources (efficiency). While this kind of study design is the predominant one in high-income countries, it mostly remains unaffordable in low and middle-income countries. Cross-sectional surveys, as it has been already mentioned above, are still the best type of data to be collected with all the known limitations for any causal inference let alone efficacy, effectiveness, and efficiency. Understandably, when certain cross-country studies involving population surveys are implemented by some international bodies, they consider this as public health surveillance rather than data for testing research hypotheses about effects of the intended policy measures. In this case, researchers from LMIC can only show the decision-makers how and in what way their country differs from other countries involved in the same international surveillance project. Suggested decisions will derive from better designed studies conducted in high-income countries with all the subsequent limitations of results transferability to populations with other demographic, socioeconomic, cultural, educational and other types of background. As a result, decision-makers usually ignore such evidence even when it is likely to be applicable.

RESEARCH OR SURVEILLANCE?

Surveillance, which is usually considered apart from research activities (which is also done so in the paper on the following pages (Nordstrom, 2012)) and as public health routine practice aimed at the ongoing data collection for timely decision making, is perceived quite differently from two perspectives: high-income countries and international bodies on the one hand and LMIC on the other. Surveys included in international surveillance systems are ‘all available data’ for LMIC and minimal required data for comparison between countries, from the point of view of international bodies.

However, surveillance systems as stated by some of the authors (Klaucke et al., 1988; Lee, Thacker, & Louis, 2010) to list just a few, are expected to provide data on prevalence of related health behaviors; factors that influence those behaviors; incidence, prevalence and mortality caused by diseases attributable to these behaviors; and effects of relevant policies and programs. Data collected to compare between countries would answer the first of the above-mentioned criteria related to prevalence of certain unhealthy or risky behaviors. These would get to the descriptive reports listing prevalence of behaviors and of exposures to policies and programs. Causal inference regarding the determinants of health behaviors and impact of policies usually stays beyond the survey results and the subsequent reports. Some survey data allow for further analysis and can result in valuable inferences when appropriate human resources are applied. In other cases, some adjustment of a questionnaire may be needed in order to collect more than just descriptive results.

TCPHEE MISSION

As described above, there is quite a lot of data in the world that has only been used for descriptive reports and contains valuable information, which can direct public health decision making in poor countries and which looks outdated for the authors, editors and readers in rich countries.

Beside this incongruence in the quality of data, there is a problem of skills sharing and learning. Many researchers from LMIC have never got accepted in high-impact journals and have to publish in national and local journals which do not comply with international requirements. This enhances ‘social stratification’ with studies in developed countries becoming more and more sophisticated and studies in poor countries replicating the similar ones. Smart people from poor countries will definitely benefit from considerate reviews of their studies by more experienced researchers. We hope that with active participation of those colleagues from western countries who know how the development happens, our journal will be able to contribute to the advancement of those researchers who did not have an opportunity to graduate from western universities.

We hope in this way to contribute to a better world based on the principles of equity, justice and solidarity as well as health for all.

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This article was published June 15, 2012.

REFERENCES

- Desai, K. T., Gharat, V. V., Nayak, S. N., Patel, P. B., & Bansal, R. (2012). Tobacco smoking patterns, awareness and expenditure: a cross-sectional overview from Surat City, India. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 25-32.
- Iakunchykova, O., & Andreeva, T. (2012). Suboptimal parenting practices as a risk factor for adolescent alcohol consumption in Ukraine. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 33-42.
- Klaucke, D. N., Buehler, J. W., Thacker, S. B., Parrish, R. G., Trowbridge, F. L., & Berkelman, R. L. (1988). Guidelines for evaluating surveillance systems. *MMWR*, 37(^ s5).
- Klymenko, N., & Andreeva, T. (2012). Determinants of condom use with occasional partners among MSM in Ukraine. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 43-54.
- Krasovsky, K. (2012). Dynamics of smoking prevalence and tobacco products market in Belarus. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 9-16.
- Krasovsky, K. S. (2012). Commentary to the article 'Smoking prevalence and its characteristics among the population aged 25-64 years according to the postal surveys of Kiev residents'. [Editorial note]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 23.
- Kvasha, E. (2012). Smoking prevalence and its characteristics among the population aged 25-64 years according to the postal surveys of Kiev residents. [Original study]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 17-22.
- Lee, L. M., Thacker, S. B., & Louis, M. E. S. (2010). *Principles and Practice of Public Health Surveillance*: Oxford University Press.
- Nordstrom, D. L. (2012). Primer on Health Surveys. [Literature review]. *Tobacco Control and Public Health in Eastern Europe*, 2(1), 5-8.