OPEN ACCESS
Freely Available Online

INTERNATIONAL JOURNAL OF GENERAL PRACTICE
ISSN NO: 2692-5257

Short Communication
DOI: 10.14302/issn.2692-5257.ijgp-18-2296

Looking for the Best Journey: Real Methodology of Research in General Medicine

Jose Luis Turabian [1,*]

[1] Specialist in Family and Community Medicine. Health Center Santa Maria de Benquerencia. Regional Health Service of Castilla la Mancha (SESCAM), Toledo, Spain.

Abstract

The research methods that the researcher uses are one of the most important parts of a study. But, classically, it is said that the initial question must be "What do I need to know and why?" Only after that, you can decide the method that best suits the particular purpose of the study is chosen. But, this article aims to put the "scientific method" in real life in general medicine and primary care, and so the "process of searching for the best research study" is like when we want to find the best time to buy airline tickets: we must look for cheap flights without a date or destination; without a predetermined and invariable research objective. "It's much easier to find deals on flights than hotels." It is easier to have a research method available (accessible, useful, and possible) than to clearly specify an objective or research topic. There are times when the destination of our trips is based on a good offer of flights. Once we have the method / design, we can decide on the objective to achieve (more modest, grander, etc.). So, be flexible with your objective. When you see a good possibility of conducting a research study, for having the research methods do not let it escape because of the topic or research objective. In research, as in travelling, the adventure is very exciting.

Corresponding author: Jose Luis Turabian, Health Center Santa Maria de Benquerencia Toledo, Spain. E-mail: jturabianf@hotmail.com

Key words: Research Methodology; Research Design; General Practice .

Received: Aug 11, 2018 **Accepted:** Aug 25, 2018 **Published:** Aug 27, 2018

Editor: Ozgur KARCIOGLU, Dept. of Emergency Medicine, Univ. of Health Sciences, Istanbul Education and Research Hospital, Turkey.

"...He took out three clothespins... and with them he clamped the book and hung it from one of the cords [in the clothesline]...

What's the experiment? asked Rosa.

What experiment? asked Amalfitano.

With the hanging book, said Rosa.

It isn't an experiment in the literal sense of the word, said Amalfitano.

Why is it there? asked Rosa.

It occurred to me all of a sudden, said Amalfitano, It's a Duchamp idea, leaving a geometry book hanging exposed to the elements to see if it learns something about real life..."

Roberto Bolaño. 2666.

Introduction

The research is based on the scientific method and this is the method of systematic study of nature that includes observation techniques, rules for reasoning and prediction, ideas about planned experimentation and ways to communicate experimental and theoretical results. In addition, the research has a series of characteristics that help the researcher to be effectively governed in it. Although there are a wide variety of opinions about the meaning of the research process, the common denominator is constituted by the following elements: theme to be investigated, problem to be solved, and methodology to be used (1). The complete process could be: idea, theme, reading of bibliography, hypothesis, objective, design, methodology, location, type of sample, sample size, data collection, variables and values that take, coding / classification, data collection, analysis statistical, and results [Figure 1]. Of course all these factors are interrelated, and you can not decide on a certain element without deciding at the same time on others, which can produce a scenario of difficulty for the researcher novice, especially in contexts complexity and uncertainty as general medicine [2-4].

Thus, the aim of this article is to address these elements and concepts that are usually absent in the usual texts, in order to allow us to imaginatively construct the methodology of scientific research in general medicine.

The research methods that the researcher uses are one of the most important parts of a study. The "classic" texts tell us that research methods and designs can be over-ridden if we do not know what we want to investigate, because they only regain their true meaning when we have clarity about our research objects. Therefore, the first thing would be the idea or the objective. It is said: it is not the toolbox that makes the carpenter. It is necessary to have "carpenter's mind", then the tool box will be taken out or it will be supplied with the necessary ones for the construction and development of an idea [5-10].

And in this line of thinking, the initial question of "What method or design to use in the study?" it is not correct. The question must be. "What do I need to know and why?" Only when we have an answer for what is the best way to collect that information? And when I have that information, what will I do with it? I can decide the method or the design. The methods are selected because they provide the data that is needed to complete the study. That is, the method that best suits the particular purpose of the study is chosen [11].

But ... in real life there are barriers and opportunities that modify these orthodox laboratory considerations. So, how to find the best real-life research study in general medicine? It's like looking for a trip in an Internet search engine [12]:

It is Easier to Find the Method-Design First than the Objective of the Study

In real life in family medicine, the process of "searching for the best research study" is like when we want to find the best time to buy airline tickets: we must look for cheap flights without a date or destination. It's much easier to find deals on flights than hotels. There are times when the destination of our trips is based on a good offer of flights.

That is, for the "best research study" in real life in family medicine, it is much easier to find the method / design (accessible, useful, and possible) than the objective of the study [13].

The main sources of knowledge or research methods are exposed in the Table 1[5, 14, 15]. Both qualitative and quantitative research is useful sources of evidence (Table 2). Thus, for example, qualitative research may be more accessible, or a more viable form of evidence and it also illustrates how our traditional

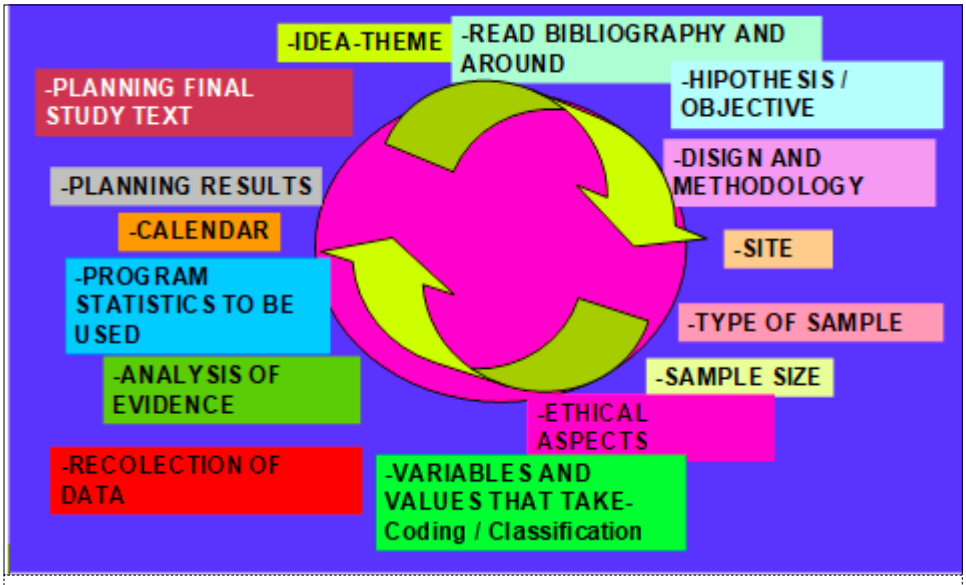

Figure 1. Orthodox process of research

Table 1. QUANTITATIVE AND QUALITATIVE RESEARCH CRITERIA

CHARACTERISTICS OF THE QUANTITATIVE PARADIGM OF RESEARCH	**CHARACTERISTICS OF THE QUALITATIVE RESEARCH PARADIGM OF RESEARCH**
Global conception positivist, hypothetical-deductive, particularistic, objective, results-oriented and typical of the natural sciences	Global conception phenomenological, inductive, structuralist, subjective, process-oriented and typical of the social sciences
The researcher can influence the object of study by fragmenting it and manipulating its parts independently	They arise because the statistical data do not reflect the complex situations that are manifested in human behavior and also because the behavior involves multiple aspects or situations that can not be isolated, since they are dependent on each other
The researcher can maintain a distance from the object of study	The researcher and the object are interrelated, influencing each other
The results obtained imply the generalization of the same	Generalizations are not possible, only results referring to a particular context are obtained
They require a pre-structured design	The design is open and unfolds throughout the research process
The ideal setting is the laboratory	They are carried out in community

Table 2. THE MAIN SOURCES OF KNOWLEDGE OR RESEARCH METHODS

SOURCES OF KNOWLEDGE OR RESEARCH METHODS	CONCEPT	FUNCTIONS
1.-Observación	It is the most elementary form of scientific knowledge. It requires becoming aware of the object, recognizing the object and describing the object. There are no guarantees of precision; The most that can be done is to increase the controls	-Supply primary information -Make see the problems -Hypothesis contrast
2.-Measurement	Measure is to attribute values to the variables	-Qualitative concepts -Quantitative concepts
3.-Experiment	It is a type of activity carried out to obtain knowledge and discover objective laws, through special mechanisms and instruments	- Isolation of the phenomenon -Reproduce the process in controlled conditions -Planing and vary the conditions in order to obtain the desired result

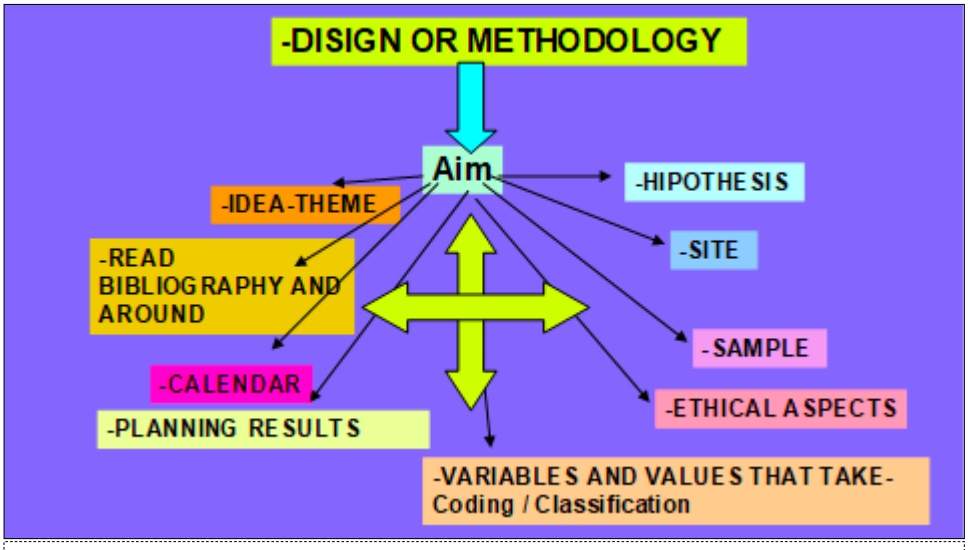

Figure 2. Pragmatic, Strategic and creative research process.

assumptions about evidence do not take into account the implications of context, meanings, and practice clinic. In this way, the researcher first decides the method (for example, qualitative research), and from here is flexible with the idea, theme and objectives.

There are times when the destination of our trips is based on a good offer of flights. If the flight is expensive, the trip is over. If the method / design are not accessible to us, due to technical, economic difficulty, etc., the study is over. Once we have the ticket, we can choose whether to spend a lot or little at the hotel. Once we have the method / design, we can decide on the objective to achieve (more modest, grander ...). When looking for the best study, the researcher would have to mark the starting point (the departure airport, the real context of his work where the study will be developed, his consultation, his patients, his schedules, etc., that is, the study part from its actual practice), and allow the option of any subject / goal ordered by difficulty, accessibility or cost (accept, from your departure airport any place as a destination, according to the dates that go well and see the list of destinations appear sorted by price) (Figure 2).

Be Flexible with your Objective

For the best research study, remember that, like buying a plane ticket, the price drops a lot in less centrally located airports, and you can contemplate the possibility of landing at an airport a little further away or completing the trip by rental car. Assess the possibility of looking for an "approximate or intermediate objective" with respect to the ideal that is not accessible (due to cost, difficulty, time, resources, etc.).

Feel like those movie characters that arrive at an airport and buy "the first ticket that goes anywhere." If the offer is a real bargain, we do not think twice: if the method / design is a "bargain" (easy, beautiful, we have experience, we are interested, it is strict, clear, precise, it is the most appropriate technique for certain types of examination and so as not to miss unnoticed details of a certain problem, etc.), do not think twice, and let's accept the objective with which it can be related, it is simply that there is no problem in changing the destination of the trip to take advantage of the opportunities, in addition, each place has something special, sometimes discovering a city 'blindly' makes you do not expect anything and you find beautiful corners or surprising traditions ... When you see a good possibility of conducting a research study, for having the research methods, because of the subject or research objective; be flexible with your goal; do not let it escape: investigate, how to travel, the adventure is very exciting.

Choose to get up Early or Stay up late: Accept that you will have to make certain Efforts and Suffer Difficulties

We all like to achieve goals easily, but research, such as traveling cheaply, means accepting some inconvenience, such as getting up early or staying up late (the worse the time is, the cheaper the flight is.) Nobody likes to get up at 3 o'clock in the morning to catch a flight or arrive at your destination at dawn, that's what airlines know and they usually put the cheapest fares at that time, and maybe you have to choose the flights that leave early or those that return very, very late at night).

In general medicine, the natural work material, in addition to the patients themselves, are their clinical histories: collect the data of each patient in the clinical history as if it were to be published. In many times a dynamic observation is required under conditions of experimental intervention. All this things are often exhausting, and they demands efforts.

Plan your Research Study Months in Advance and be Flexible with your Dates

In the search for the best trips, there is a golden rule: the closer the departure date, the more difficult it will be to find a cheap trip. If you want to plan a trip well, and save something, you must do it six months in advance: try to be flexible with the date.

Before starting an investigation should read related literature, but should or should not rush the literature? Saturated by what has been written, do we not run the risk of being suggested and losing the priceless gift of independence of judgment? Will not this saturation of information be fatal to our aspirations to find something completely original? But, on the other hand, do not initiate any inquiry without having all the bibliographic background in view avoid the painful disenchantment that comes from knowing that we have wasted time rediscovering known things and neglecting the study of the true gaps in the subject. But it is better

to risk repeating discoveries than to renounce any attempt at experimental inquiry [5]. But remember that all this will take time; be flexible with your dates.

In the planning of a research study, there must also be time to understand and define the assumption or hypothesis. It is necessary that you observe carefully, for months, the facts. Once the facts are observed, its significance must be assessed; a hypothesis that links the unusual phenomenon to some of the known laws.

Good hypotheses are happy generalizations or risky inductions.

Hypotheses make statements about relationships between variables and provide guidance to the researcher on how the initial idea or hunch can be tested. Some Rules of the hypothesis would be: that they are obligatory, that is to say that there is no other possibility to explain the phenomenon; that are verifiable; that are easily imaginable, that is, that can be transformed to use in practice; and that they to suggest investigations and controversies. This takes time; be flexible with your study planning [5].

In conclusion: this article aims to put the "scientific method" in real life, as it happens in the novel by Roberto Bolaño, 2666, where one of the characters, one afternoon takes a book of poetry, which he never remembered to have bought, and three clothespins, and he hang it from a clothesline to check how it resist the weather and to help it learn "four things about real life" [16].

To achieve the best research study, see things for the first time. Clean the mind of prejudices and images of others, make the firm intention to see and judge for you; renew that state of mind - mixture of surprise, emotion and curiosity - of the scientist who poses as if it were the first time the problem [5].

Reference :

1. Howie JGR (1989) Research in general practice. London: Chapman and Hall Ltd.
2. Turabian JL (2018) Some Basic Concepts of Family Medicine Explained by Means of Fables (Part 1 of 2): Uncertainty, Complexity, Community, and Variability. Archives of Community and Family Medicine; 1(1): 1 -7.https://docs.google.com/viewer?url=http://www.sryahwapublications.com/archives-of-community-and-family-medicine/pdf/v1-i1/1.pdf&embedded=true?iframe=true&width=700&height=450
3. Turabián JL, Perez Franco B (2006) The Process by Which Family Doctors Manage Uncertainty: Not Everything Is Zebras or Horses. Aten Primaria; 38 (3):165-67. http://www.elsevier.es/es-revista-atencion-primaria-27-articulo-el-proceso-por-el-cual-13090982
4. Innes AD, Campion PD, Griffiths FE (2005) Complex consultations and the 'edge of chaos'. Br J Gen Pract; 55 (510): 47-52. http://bjgp.org/content/55/510/47
5. Ramón y Cajal S (1944) Los tónicos de la voluntad. Buenos Aires: Austral. Espasa-Calpe Argentina.
6. Bauman KE (1980) research methods for community Elath and welfare. New York: Oxford University Press.
7. Parttridge C, Barnitt R (1986) Research guidelines. A handbook for therapists. London: Heinemmann Physiotherapy.
8. Garcia Manzanedo H (1983). Manual de investigación aplicada en servicios sociales y de salud. México: La Prensa Mexicana, S.A.
9. Spilker B (1984) Guide to clinical studies and developing protocols. New York: Raven Press.
10. Bowling A (2000) Research methods in health. Investigating health and health services. Buckingham. Philadelphia: Open University Press.
11. Bell J (1997) Doing your research project. A guide for first-time researches in education and social sciences, Buckingham: Open University Press.
12. Bargueño MA (2018) El mejor momento para comprar los billetes de avión. El País; 27 JUL. https://elpais.com/elpais/2018/07/26/album/1532595683_005204.html#
13. Amstrong D, Calnan M, Grace J (1990) Research methods for general practitioners. Oxford: Oxford Medical Publications. Oxford University Press.
14. Bacallao Gallestey J (1986) Apuntes sobre aspectos metodológicos de la investigación científica. Tomo I. La Habana: Editorial Pueblo y Educación.
15. Frambach JM, van der Vleuten CPM, Durning SJ

(2013) AM Last Page: Quality Criteria in Qualitative and Quantitative Research. Acad Med; 88(4): 552. http://journals.lww.com/academicmedicine/Citation/2013/04000/AM_Last_Page___Quality_Criteria_in_Qualitative_and.29.aspx

16. Roberto Bolaño. 2666 (THE PART ABOUT AMALFITANO). http://liblit.com/2005/12/30/roberto-bolano-2666-ii/