

Editorial

Dear author: is your intervention's description in clinical pharmacy research clear enough?

Caro autor: a descrição de sua intervenção em pesquisa de farmácia clínica é clara o suficiente?

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DOI: 10.30968/rbfhss.2020.114.0538

What is do science? One possible answer would be to investigate questions about the world or phenomena of this, find answers to these questions, and assess their degree of certainty through the reproducibility and repeatability of their results or answers. In the scientific investigation of the world or its phenomena there are four main objectives: 1) description by means of classifications or taxonomies; 2) explanation of the same; 3) prediction of what will occur considering models and, 4) intervention in processes or specific systems to measure results and ultimately propose improvements for the society.¹ In the field of health and education, the United Nations Educational, Scientific and Cultural Organization (Unesco) defines research as the set of systematic and creative actions to increase knowledge about human beings, culture and society and to apply it in new areas of interest to society.¹

In this field, the "Publish or perish" maxim is commonly mentioned among researchers and journal editors.² And, despite this understanding, it is not always easy to succeed in publishing when submitting an article. Unfortunately, even when the articles are published, the indication of low quality in systematic reviews with or without meta-analysis is frequent, especially in the evaluation of articles on pharmaceutical services.³⁻⁵ Both Unesco and the scientific method reinforce the need to outline and conduction research studies with an accurate description of the interventions performed so that reproducibility is possible.^{6,7} Research studies in the field of Clinical Pharmacy usually involve interventions that are provided in different clinical services and are almost always not sufficiently described in the articles or even in the research projects that originated them, which is essential not only for the quality of the studies, but also for education and for the assistance provided.⁸

Thus, this editorial introduces fundamental aspects to be considered when describing interventions in Clinical Pharmacy as a contribution to the planning of research studies and the essay of articles themselves. Several authors have leaned over already addressed the topic and bring us with precise indications of how to do it, what are we synthesize in Figure 1.^{5,6,8-10}

Finally, to answer the question: "Is the description of your intervention in clinical pharmacy research clear enough?", authors would need to review whether there is minimally information in your manuscript about: what was done, focus/reason, sources of clinical data, procedures/actions taken by the pharmacist, moment, autonomy with respect to medication and ordering tests; form of contact with the recipient, setting and materials that supported (what and who provided); repetition/recurrence of the action; contact (frequency, method), if the intervention was standard or personalized per patient, Figure 2. It is reiterated that clear descriptions allow, ultimately instance, measurement the impact of the care provided by the pharmacist to patient, in addition to guiding pharmacists in development of methods of documenting quality in their own practices. We hope, in this editorial, we have been clear to assist them.

Brazilian Journal of Hospital Pharmacy
and Health Services
Revista Brasileira de Farmácia Hospitalar
Serviços de Saúde

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Editorial Design: Liana de Oliveira Costa

Website support: Periódicos em Nuvens

ISSN online: 2316-7750

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Publication of Hospital Pharmacy and Health Services
Brazilian Society / Sociedade Brasileira de Farmácia
Hospitalar e Serviços de Saúde

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Figure 1. Information on the description of interventions in the area of Clinical Pharmacy. (Continued)

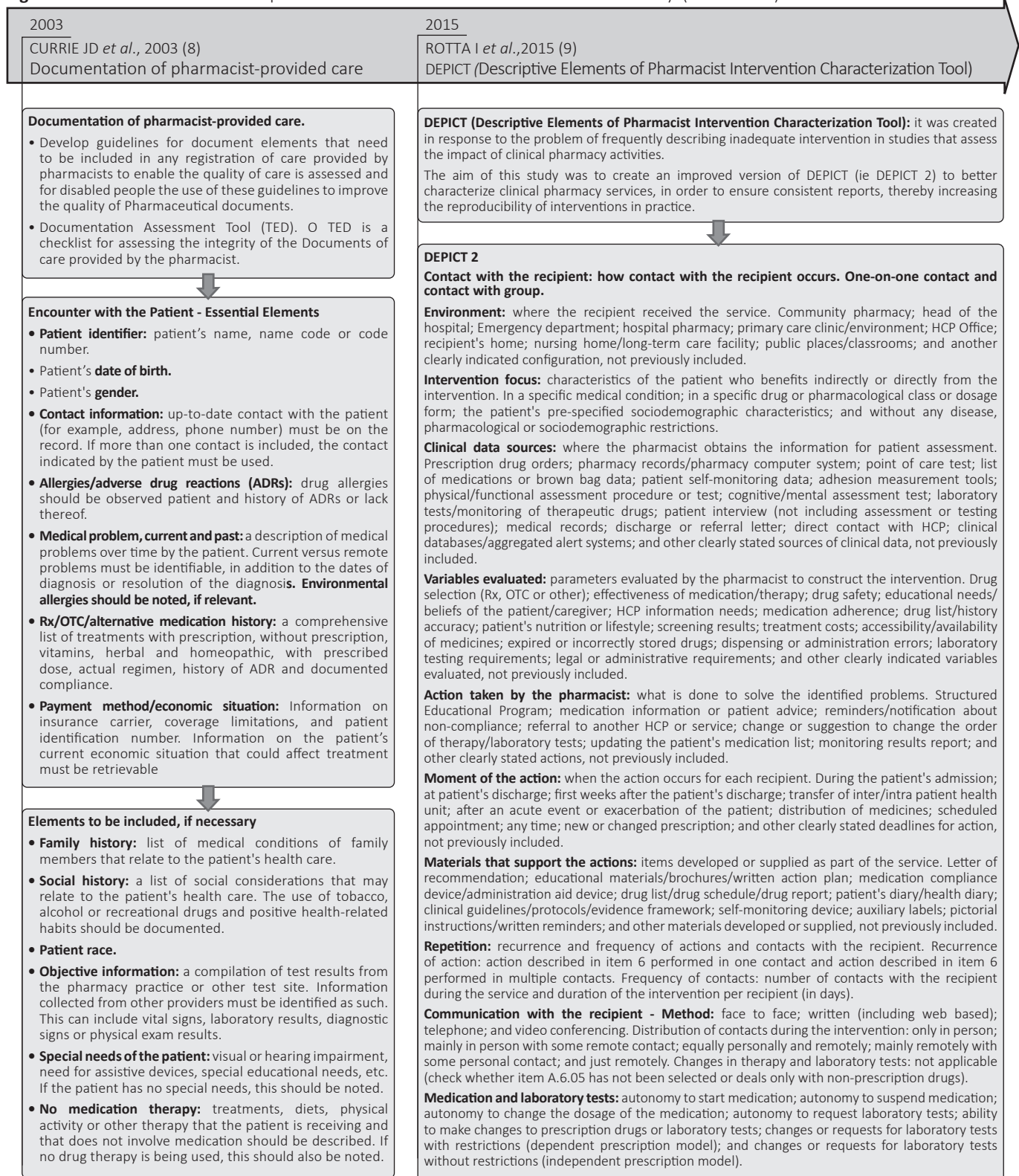


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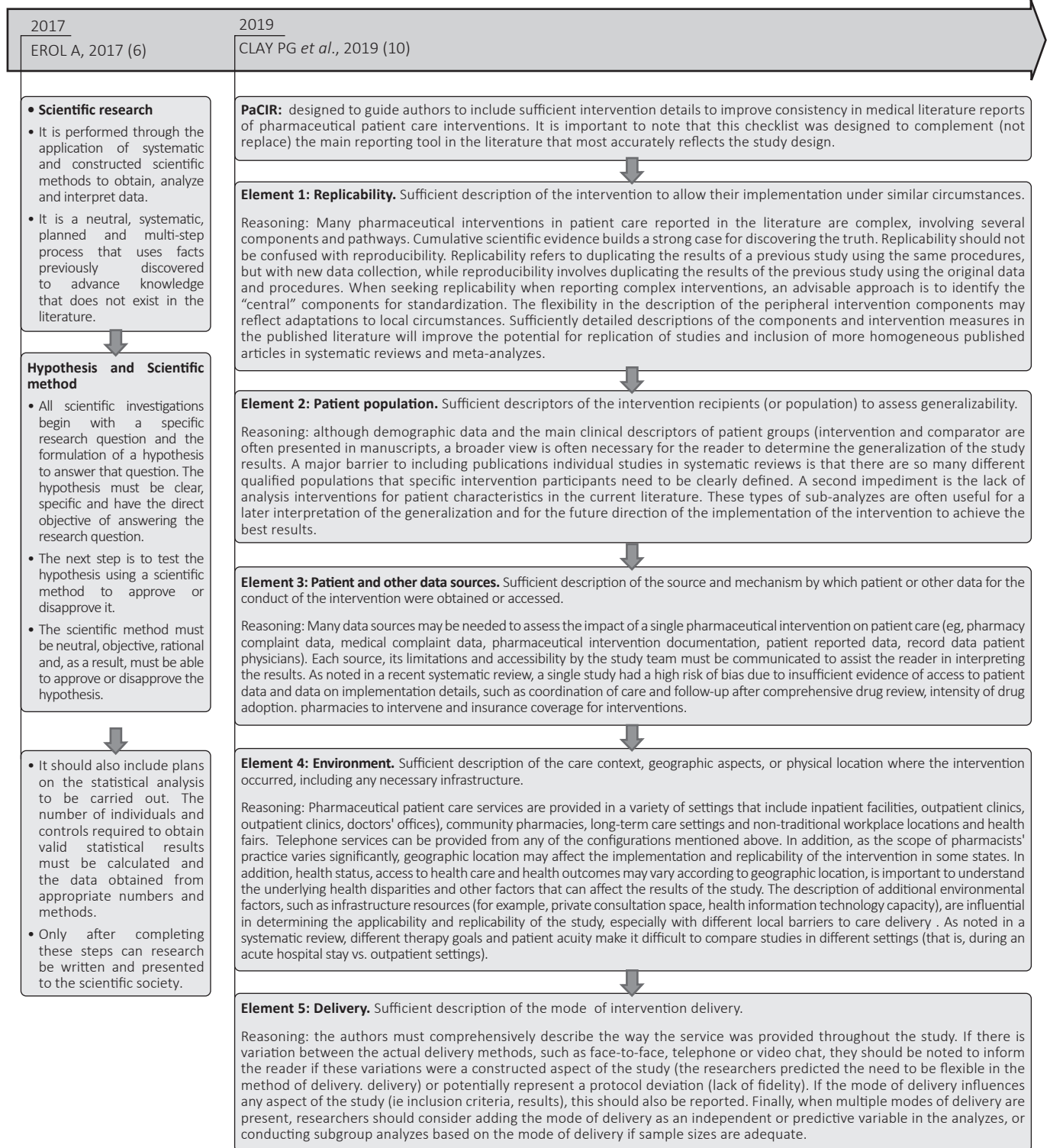


Figure 1. Information on the description of interventions in the area of Clinical Pharmacy. (Concluded)



Figure 2 Systematization of description elements and intervention classification systems according to different protocols.

Systematization instrument and proposal

DEPICT: Descriptive elements of the characterization tool for the pharmacist's intervention (Rotta *et al.*, 2015)¹⁰

Contact with the recipient: One-on-one contact or contact with group.

Environment: Community pharmacy, hospital bedside, emergency department, hospital pharmacy, ambulatory/primary care, HCP1 office, recipient's home, nursing home/long-term care facility, public places/classrooms; another environment clearly declared, not previously included.

Focus of the intervention: On a specific medical condition, on a specific medicine or pharmacological class or dosage form, on a pre-specified sociodemographic characteristic of the patient; without any disease, pharmacological or sociodemographic restriction.

Clinical data sources: Drug prescription orders, pharmacy records/pharmacy computer system, point-of-care test, medication list or brown bag data, patient self-monitoring data, adherence measuring tools, physical/functional assessment procedure or test, cognitive/mental assessment test, laboratory tests/therapeutic drug monitoring, patient interview (not including assessment procedures or tests), medical records, discharge or referral letter, direct contact with HCP, aggregated clinical databases/alert systems, other sources of clinical data clearly stated, not previously included.

Actions taken by the pharmacist: Structured educational program, drug information or patient counseling, reminders/notification about non-compliance, referral to other health care professional or service, change or suggestion for change in the order of therapy/lab tests, update of medication list, report of the monitoring results, and other clearly stated actions, not previously included.

Moment of the action(s): On patient admission, on patient discharge, first weeks after patient discharge, inter/intra-patient referral to the health unit, after an acute patient event or exacerbation, medication dispensing, scheduled appointment, at any time, new or changed prescription, and other clearly established timing of action(s)

Materials that support action(s): Discharge or referral, educational materials/leaflets/written action plan, medication compliance device/administration aid device, medication list/medication schedule/Medication Report, patient diary/Health Diary, guidelines/clinical protocols/evidence chart, self-monitoring device, auxiliary labels/pictorial instructions/written reminders, and other materials developed or provided, not previously included.

Repetition - Action recurrence: Action(s) described in item 6 performed in one contact, action(s) described in item 6 performed in multiple contacts.

Frequency of contacts: Number of contacts with the recipient during the service, duration of the intervention per recipient (in days).

Communication with the recipient - Method: Presential, written (including web-based), telephone, video conference

Distribution of contacts during the intervention: Only in person; mainly in person with some remote contact; equally in person and remotely; mainly remotely with some contact in person; only remotely

Medication and laboratory tests: Autonomy to start, suspend or change medication dosage; autonomy to order laboratory tests.

TIDieR: Template for Intervention Description and Replication (De Barra *et al.*, 2019)⁹

Brief name: Provide a name or phrase which describes the intervention

Reason: Describe any the rationale, theory or objective of the elements essential to the intervention.

What - Materials: Describe any physical or informational materials used in the intervention, including those provided to the participants or used in applying the intervention or in training the intervention providers. Provide information on where the materials can be accessed (such as online appendix, URL)

Procedures: Describe each of the procedures, activities and/or processes used in the intervention, including any enabling or support activities.

Who provided: For each category of intervention provider (such as psychologist or nursing assistant), describe their expertise, background and any specific training given

How: Describe the modes of application (as in person or by some other mechanism, such as internet or telephone) of the intervention and if was performed individually or in groups

Where: Describe the type(s) of location(s) where the intervention took place, including any necessary infrastructure or relevant resources

When and how much: describe the number of times that the intervention was performed and in which period, including the number of sessions, your schedule and its duration, intensity or dose

Adaptation: If the intervention was planned to be personalized, titrated or adapted, describe the changes (what, why, when and how)

Modifications: If the intervention was modified during the course of the study, describe the changes (what, why, when and how)

How well-planned: If adherence or fidelity to the intervention was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them

Real: if the adherence or fidelity of the intervention was assessed, describe the extent to which the intervention was carried out as planned.

PaCIR: Patient Care Intervention Reporting (Clay, 2019)¹²

Replicability: Sufficient description of the intervention to allow its implementation under similar circumstances.

Patient population: sufficient descriptors of the intervention recipients (and/or population) to assess generalization

Patient/Other Data Sources: Sufficient description of the source(s) and mechanism(s) by which the patient or other data for performing the intervention were obtained or accessed.

Environment: sufficient description of the geographic and/or physical location where the intervention took place, including any necessary infrastructure.

Delivery: sufficient description of the mode(s) of intervention delivery.

Frequency and duration: sufficient description of the frequency, number, and duration of the session(s) for the intervention.

Pharmacist function/responsibility: sufficient description of the roles and responsibilities of the pharmacist(s) and others involved in the intervention.

Attribution: sufficient description of the degree to which the results are directly attributable to the roles/responsibilities of the pharmacist.

Exclusive attributes: sufficient description of factors not treated in other elements that may affect replication.

¹HCP: Health Care Professional.

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