

Lire un article médical

SÉANCE 4 : CRITERES DE CAUSE ET EFFET,
L'ETUDE OBSERVATIONNELLE 2 - L'ETUDE DE COHORTE,
MODELE D'ANALYSE 1

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Les critères de Hill (1965)

Corrélation \neq causalité

1. Force de l'association
2. Stabilité de l'association
3. Cohérence
4. Spécificité
5. Relation temporelle
6. Relation dose-effet
7. Plausibilité
8. Preuve expérimentale
9. Analogie

MAGIC : Les critères d'Abelson (1995)

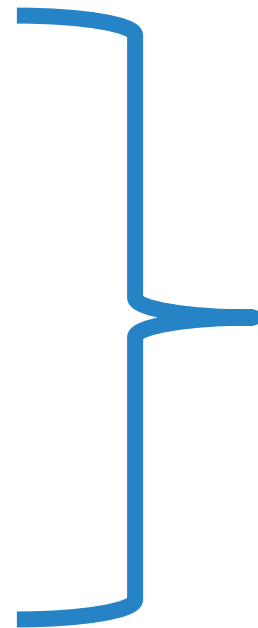
Magnitude

Articulation

Generalité

Interêt

Credibilité



de l'effet (*statistique*)

L'étude de cohorte

mesure **la survenue d'événements dans le temps** chez **une population définie** qui est suivie sur plusieurs mois ou années à partir de données qui peuvent être :

- Consultations
- Interviews,
- Questionnaires
- Prélèvements biologiques
- Dossiers médicaux

peut être prospectif ou rétrospectif

En principe...

- Les participants n'ont pas encore la pathologie en question
- L'exposition au facteur de risque potentiel doit être évalué :
 - au début
 - à des intervalles déterminées au cours de l'étude
- Les participants doivent être suivis régulièrement

Biais les plus courants des études de cohorte

Les perdus de vue

- Informations manquantes

L'effet du 'travailleur sain'

- Population générale comporte des personnes malades
- S'assurer de la comparabilité des groupes

Taux d'incidence et taux de risque (RR)

	Cancer	Sains	Total	Taux d'incidence
Fumeurs	42	27 000	27 042	1,5/1000/an
Non-fumeurs	7	63 000	63 007	0,1/1000/an
Total	49	90 000	90 049	

Exemple hypothétique d'une étude de cohorte sur le lien entre le tabac et le cancer de la gorge (sur 1 an)

Le taux de risque se calcule en divisant le taux d'incidence chez les personnes exposées par celui de celles qui ne sont pas exposées.

- Soit $1,5/0,1 = 15$
(risque 15 fois plus élevé chez les personnes exposées)

Avantages & inconvénients

+

On peut évaluer la survenue d'événements multiples.

On peut observer plusieurs facteurs d'exposition.

On évalue l'exposition en amont (pour une étude prospective).

On peut mesurer les facteurs d'exposition rares

On peut démontrer le lien de cause à effet.

On peut mesurer incidence et prévalence.

-

Couteux et chronophage.

Biais induit par l'attrition.

Risque élevé de facteurs de confusion..

Biais d'observation.

Biais de comportement..

La classification des individus (concernant l'exposition ou la survenue d'un événement) peut être modifiée par des changements apportés au processus de diagnostic.

Modèle d'analyse 1

Coughlan *et al.* (2007)

- Cited by : Fothergill, A., and A. Lipp. "A guide to critiquing a research paper on clinical supervision: enhancing skills for practice." *Journal of psychiatric and mental health nursing* (2014)

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Section one – elements influencing the believability of the research

Writing style

*Is the report well written – concise, grammatically correct, avoid the use of jargon?
Is it well laid out and organised?*

Author

Do the researcher(s) qualifications/positions indicate a degree of knowledge in this particular field?

Report title

Is the title clear, accurate and unambiguous?

Abstract

Does the abstract offer a clear overview of the study, including the research problem, sample, methodology, findings and recommendations?

Section two – elements influencing the robustness of the research

Purpose/research problem

Is the purpose of the study/research problem clearly identified?

Logical consistency

Does the research report follow the steps of the research process in a logical manner? Do these steps naturally flow and are the links clear?

Literature review

Is the review logically organised? Does it offer a balanced critical analysis of the literature? Is the majority of the literature of recent origin? Is it mainly from primary sources and of an empirical nature?

Theoretical framework

Has a conceptual or theoretical framework been identified? Is the framework adequately described? Is the framework appropriate?

Aims/objectives/research question/hypotheses

Have aims and objectives, a research question or hypothesis been identified? If so are they clearly stated? Do they reflect the information presented in the literature review?

Sample

Has the target population been clearly identified? How was the sample selected? Was it a probability or non-probability sample? Is it of adequate size? Are the inclusion/exclusion criteria clearly identified?

Ethical considerations

Were the participants fully informed about the nature of the research? Was the autonomy/confidentiality of the participants guaranteed? Were the participants protected from harm? Was ethical permission granted for the study?

Operational definitions

Are all the terms, theories and concepts mentioned in the study clearly defined?

Methodology

Is the research design clearly identified? Has the data gathering instrument been described? Is the instrument appropriate? How was it developed? Were reliability and validity testing undertaken and the results discussed? Was a pilot study undertaken?

Data analysis/results

What type of data and statistical analysis was undertaken? Was it appropriate? How many of the sample participated? Significance of the findings?

Discussion

Are the findings linked back to the literature review? If a hypothesis was identified was it supported? Were the strengths and limitations of the study including generalizability discussed? Was a recommendation for further research made?

References

Were all the books, journals and other media alluded to in the study accurately referenced?



Exercice d'application

