

### Supplementary file 3: Final list and categories of codes

Poor practices happening at institutions
Adding authors that have not contributed substantially
Being added as an author when not contributed substantially
Being omitted
Omitting authors that have contributed
Ranking of authors not according to contributions
Change in author team
Changing author names on published papers
Using ideas without acknowledging their origin
Detection of plagiarism when doing systematic reviews
Students using existing projects
Academic Col
Non-financial Col
Data dredging
Data fabrication
Duplicate publication in different languages
Influence of sponsor
Non-reporting of results
Inaccurate reporting to public
Data manipulation
What was done when irregularity was detected?
Discussions within author team
Nothing was done
Formal complaint
Punishment
Discussions within author team
Decline further participation
Channels for complaints
Feelings associated with experience
Upset about what happened
Feeling powerless
Unfair process
Frustration
Did not care
Not sure how to handle situation
Insecurity
Discomfort
Concerned
Factors influencing practices/reasons for poor practices
Author team dynamics
Academic (personal) gain
Payment for assistance
Endorsement

Personal relationships
Professional relationships
Publication fees
Lack of knowledge and skills
Direct research environment (research team)
Institutions
Hierarchies within institutions
Requirements for promotion
Personal values
Lack of resources
Journal requirements
Guidelines
Cultural environment
Lack of time for research
Lack of funding
Lack of interest
Journals
Providing a service
Academic status
Researcher
Funders
Who is an author?
Challenges with authorship criteria
Timing of authorship discussions
What contribution warrants authorship? (ICMJE criteria)
Other criteria that warrant authorship
Guidelines
Arbitrary
Role of authors
What is plagiarism?
Various degrees of plagiarism
Not acknowledging origin of ideas
Using text without acknowledging source
Not sure about meaning
Translating text
Challenges related to plagiarism
What are conflicts of interest?
Levels of COI
Relationships with industry
Academic COI
Difficult to understand COI
Guideline panels
Professional relationships
Personal relationships
Anything that influences research
Research misconduct in general

Levels of misconduct
Complex issue
Crime
Global issues
<b>Implications of poor practices</b>
Affects organizational culture
Image of institution
Bias study results
Impact on researcher
Mistrust of study results
Impact on patients
Far-reaching consequences
<b>Dealing with poor practices</b>
Forgive
Responsibilities of researcher
Challenging
Institutional guidelines
Institutional support
Disciplinary action
Using Technology
Declaring COI
Decline participation
Relationships with industry
Need universal system
Learn from others
<b>Promoting good practices</b>
Training
Research team
Role-modelling
International collaborations
Organizational culture
Creating awareness
Auditing research
Institutional structures and channels
Rewards and punishments
Funding
Clear and accessible guidelines for all staff
Realistic research projects
<b>Perceptions of prevalence of poor practices</b>
Adding authors very common
Adding not common
Omitting authors relevant to clinical trials
Links with Pharmaceutical industries
Plagiarism does occur
Relevant topic
Common issue but not always overt

<b>Attitudes of researchers</b>
<b>Criteria restrictive</b>
<b>Arrogance</b>
<b>Hopeless?</b>
<b>Not tolerated</b>
<b>Difficult to be 100% honest</b>
<b>Accountability</b>
<b>Aware of research integrity issues</b>