

Appendix 3

Critical appraisal checklist of articles

Reviewer Manuscript Code
 Author Date of Review
 Journal Date of Publication

1. Screening question

	Yes	NC*	No	NA**
1.1 Does the article contain a definition of polypharmacy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it worth continuing?	<input type="checkbox"/>		<input type="checkbox"/>	

2. Detailed questions

	Yes	NC	No	NA
1.2 Is the criterion for defining polypharmacy clearly stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hint				
Based on:				
Number of medications used	<input type="checkbox"/>			
Excessive drug use	<input type="checkbox"/>			
Unnecessary drug use	<input type="checkbox"/>			
Other			
2.2 In the definition of polypharmacy, is the frequency of drug use mentioned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hint				
Continued use:				
Daily	<input type="checkbox"/>			
Once a week	<input type="checkbox"/>			
Every other day	<input type="checkbox"/>			
Monthly	<input type="checkbox"/>			
Non-continued use				
Irregular use	<input type="checkbox"/>			
Occasional use	<input type="checkbox"/>			
Other ...				
2.3 In the definition of polypharmacy, is medication types and route of administration mentioned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hint				
Pill/suppository/syrup/drop/cream/spray/injection/other	<input type="checkbox"/>			
Oral/topical/injection/inhalation/other	<input type="checkbox"/>			

		Yes	N C	No	NA
2.4	In the definition of polypharmacy, is drug type mentioned? Hint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Chemical/herbal/homemade <input type="checkbox"/>				
	Prescribed/ non-prescribed/over-the-counter <input type="checkbox"/>				
	Other ...				
2.5	Is the method for collecting data concerning subjects' drug profile for the definition of polypharmacy clearly stated? Hint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Self-declaration of the patient <input type="checkbox"/>				
	Reviewing patient's prescriptions <input type="checkbox"/>				
	Checking patient's medicine cabinet <input type="checkbox"/>				
	Using patient's' hospital records <input type="checkbox"/>				
	Using electronic databases <input type="checkbox"/>				
	Other ...				
2.6	Is the eligibility of the person examining drug profiles described?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7	Is the tool used for examining drug profiles clearly described?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8	Is the reliability and validity of the tool used for examining drug profiles described?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. If polypharmacy is defined based on number of medications

		Yes	N C	No	NA
3.1	Does it state the criterion for counting medications for the definition of polypharmacy? Hint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Number of medication items used over a specified time period <input type="checkbox"/>				
	Number of medications used over a specified time period <input type="checkbox"/>				
3.2	Is a cut point specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Is there any scientific justification or evidential resource for the mentioned cut point?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. If polypharmacy is defined based on excessive or unnecessary use of medications

		Yes	NC	No	NA
4.1	Does it state how the necessity /lack of necessity of drug use is assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Does it state how patient condition is evaluated to assess the necessity /lack of necessity of drug use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Hint				
	History <input type="checkbox"/>				
	Full evaluation (history, physical exam, workup results) <input type="checkbox"/>				
	Medical records and charts <input type="checkbox"/>				
4.2	Does it describe the eligibility criteria of the person examining patient condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	In assessing the necessity /lack of necessity of drug use, is a particular tool used to evaluate patient condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Is the reliability and validity of the tools described?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Is "excessive medication" clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Hint				
	Dosage higher than essential at each time use <input type="checkbox"/>				
	Frequency of use higher than essential <input type="checkbox"/>				
	Extra items in each regimen <input type="checkbox"/>				
	Using PIM <input type="checkbox"/>				
	Drug-drug interactions <input type="checkbox"/>				
	Drug-disease interactions <input type="checkbox"/>				
	Duplications <input type="checkbox"/>				
	Same class <input type="checkbox"/>				
	Other...				
4.5	Is a particular tool used to evaluate excessive drug use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*NC: not clear

**NA: not applicable