Table 1. Citation matrix

Number	Columns	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Rows	**Review** **Primary publication**	Martinez 2006	Clark 2007	Schmidt 2007	Marie 2009	Polisena 2009	Inglis 2011	Ciere 2012	Munro 2013	Pandor 2013	Huang 2014	Hughes 2014	Cajita 2016	Knox 2017	Or 2017	Coorey 2018	Farina 2018	Hui 2018	Muzas 2018	Yun 2018	Zhu 2019
	Number of primary studies	5	5	5	4	6	12	5	3	8	3	2	5	24	15	5	20	2	2	10	8
1	Ades 2000			*																	
2	Barth 2001		*				*			*				*							
3	de Lusignan 2001	*	*	*		*	*							*	*					*	
4	Arthur 2002										*										
5	Kasper 2002																				*
6	Artinian 2003	*			*	*			*					*	*						
7	Benatar 2003	*		*	*	*		*				*			*		*				
8	Goldberg 2003	*	*		*	*	*			*				*	*		*				*
9	Jerant 2003	*				*		*						*			*			*	
10	LaFramboise 2003				*	*		*							*							
11	Dunagan 2005			*										*			*				
12	Gesica 2005		*				*							*							*
13	Körtke 2005			*																	
14	Smith 2005													*							
15	Wu 2005																*				
16	Blum 2006						*														
17	DeWalt 2006						*							*							
18	Riegel 2006		*				*			*				*			*				
19	Sisk 2006						*							*							
20	Strömberg 2006													*	*						
21	Dalal 2007										*					*					
22	Ramachandran 2007						*														
23	Antonicelli 2008						*	*		*				*			*			*	*
24	Schwarz 2008					*								*	*		*			*	
25	Wakefield 2008						*			*				*			*			*	
26	Woodend 2008					*	*	*		*							*			*	
27	Dar 2009									*				*	*		*			*	
28	Tomita 2009								*					*	*						
29	Wootton 2009													*			*				
30	Copeland 2010											*		*			*				
31	Ferrante 2010																				*
32	Piotrowicz 2010												*		*		*				
33	Koehler 2011												*	*	*		*			*	*

34	Konstam 2011														*		*			
35	Oerkild 2011										*									
36	Wade 2011																*			*
37	Angermann 2012									*										
38	Reid 2012								*											
39	Seto 2012												*	*	*					
40	Boyne 2013														*		*			
41	Delaney 2013														*					
42	Madigan 2013													*			*			*	
43	Blum 2014																*			*	
44	Varnfield 2014															*		*	*		
45	Frederix 2015																	*			
46	Hägglund 2015												*			*					*
47	Piotrowicz 2015													*							
48	Piotrowicz 2015													*							
49	Widmer 2015															*					
50	Zan 2015												*								
51	Johnston 2016															*			*		

Discussion

In the present study, the citation matrix clearly shows the overlap of primary studies over time in review studies, based on which Overlaps (62.7%), CA (0.146), and CCA (0.101) were obtained. Overlaps and CCA-based evaluations show different interpretations. CCA is between 0 and 2, indicating a slight overlap, and % Overlaps indicates an overlap above 50%. Given that CCA is more accurate and calculates the overlap of primary studies in more than a study, it is recommended to report the extent of overlap of CCA (2).

The broader the research question of an overview, the more systematic reviews are included in an overview, such as investigating different interventions in different populations for a situation. In this case, the calculated overlap reduces with the increasing number of systematic reviews because various primary studies are included in systematic reviews. According to the above, mentioning the outcome, type of intervention, and conditions of the participants accurately in systematic reviews selected by their researchers can greatly help researchers who wish to overview in the analysis. Variety of inclusion criteria and multiple intervention methods of the same name in selected systematic reviews affect the degree of overlap (5). In general, in some systematic reviews, several interventions using different methods may be compared. It is even possible to investigate the effect of an intervention on participants with different problems. Only one group of them includes those who aim to study overview are consistent. Therefore, in this situation, the number of primary papers entered only a selected review will increase, but no overlap was found with other reviews due to the difference in interventions or participants (2, 5, 6). In the present paper, to increase the matrix accuracy and accurately investigate the overlap status, the researchers focused on only a consequence. They tried to review all primary papers that entered systematic reviews investigating the quality of life. According to Cochrane, such

a situation can reduce the potential error of calculating the overlap to a large extent.

Conclusion

The authors of an overview should report on study overlap status before reporting the results of their work. The overlap report's importance is such that it should be included in the overview evaluation checklist; however, it has not yet been considered much by the researchers. The CCA report's overlap is more accurate than % overlaps because its calculation formula calculates primary studies used in more than one review. Therefore, to investigate the overlap in overview studies, it is recommended to determine CCA because its calculation is more comprehensive and easier to understand in addition to accuracy. The low overlap also confirms the need for conducting an overview.

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