



Systematic Review of Social Media HIV Interventions

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29 June, 2018 Hong Kong





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Conflicts of Interest

- We declare no conflicts of interest.

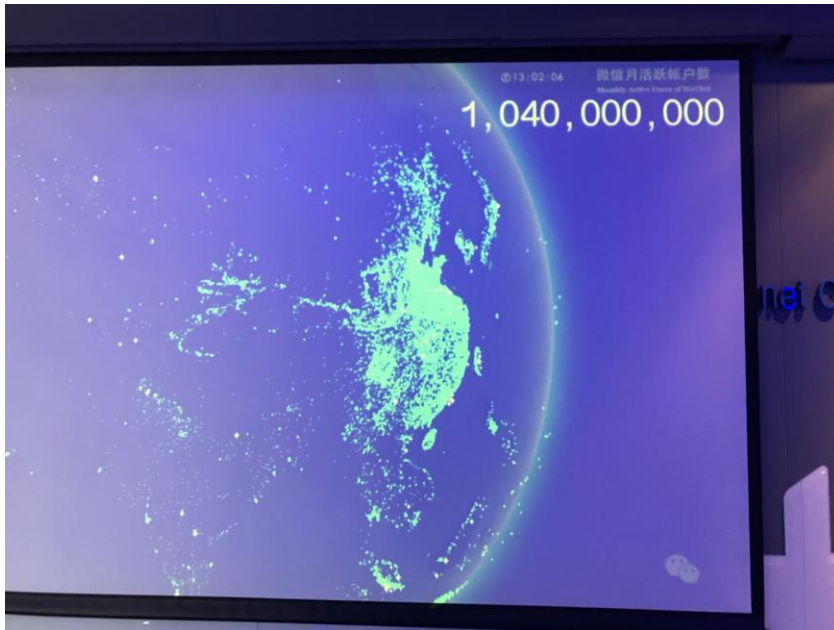


Background

- End AIDS by 2030
- 90-90-90 Goal by 2020
- In 2016:
 - 70% of PLWH globally had been diagnosed
 - 53% were receiving ART
 - 44% had achieved viral suppression



Social media



WeChat

1.04 Billion monthly active users

Photo shoot in June 2018



Blued

40 million users

Photo source: <https://www.blued.com/intl/>

Social media intervention

❖ The advantages of social media interventions

- a) reach a more diverse audience;
- b) reduce overall cost;
- c) provide opportunities for repeated exposure to messages;
- d) allow collection of real-time feedback;
- e) encourage direct engagement with messaging materials

Adam's Love added a new photo to the album: PrEP-30.
 Posted by Adams Love [?] · 28 January · 48

"เพร็ป (PrEP) คือสูตรยาต้านไวรัสที่ให้ทานเป็นประจำวันเพื่อลดความเสี่ยงและป้องกันการ ติดเชื้อเอชไอวี ใช้สำหรับกลุ่มผู้ที่ไม่ใช่เอชไอวี แต่มีความเสี่ยงสูง" สอบถามหรือขอรับเพร็ปได้ที่ คลินิกนิรนาม

Great News for all our International fans! At The Thai Red Cross AIDS Research Centre we are offering #PrEP as part of a combined #HIV prevention program. For more details please visit <http://adamslove.org/en-d.php?id=429> #ForMenWhoLoveMen



เพร็ป (PrEP) คือสูตรยาต้านไวรัสที่ให้ทานเป็นประจำวันเพื่อลดความเสี่ยงและป้องกันการ ติดเชื้อเอชไอวี ใช้สำหรับกลุ่มผู้ที่ไม่ใช่เอชไอวี แต่มีความเสี่ยงสูง สอบถามหรือขอรับเพร็ปได้ที่ คลินิกนิรนาม

ADAM'S LOVE





Study focus

- Whether **social media interventions** are effective in **HIV prevention**?
- If yes, how do social media contribute to HIV prevention?



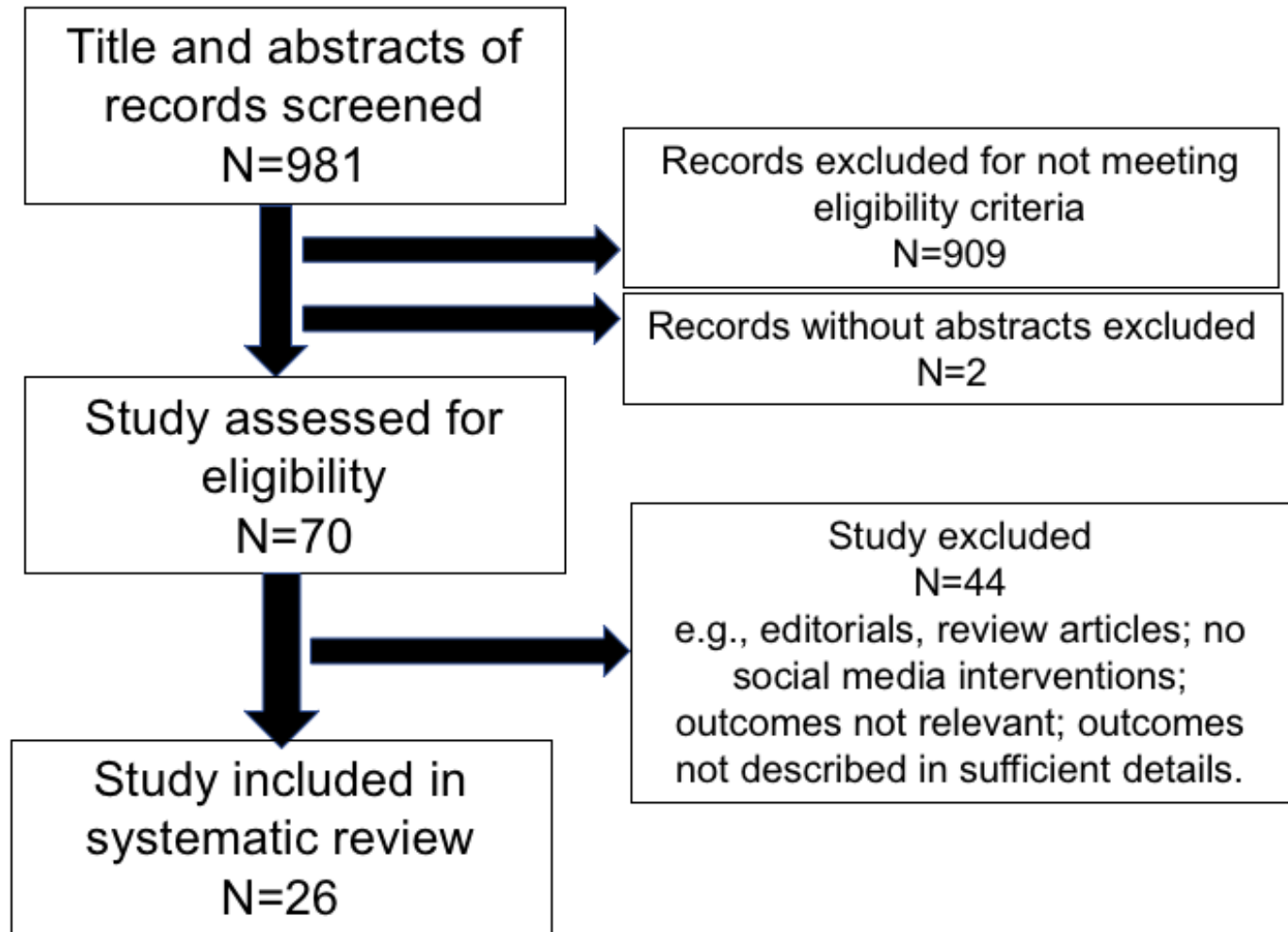


Methods

- Systematic review and meta-analysis
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline
- Registered in PROSPERO on 22 September, 2016 (No.: CRD42016048073)



Screening Process





Studies	Methods for selecting study participants	Methods for measuring exposure and outcome variables	Design-specific source of bias	Method of control confounding	Statistical methods	Other bias
Anand 2015	+	-	+	-	-	+
Anand 2016	-	+	-	-	+	+
Bauermeister 2015	+	+	-	+	+	+
Brady 2014	-	-	+	-	-	+
Buzdugan 2016	-	+	-	-	-	+
Elliot 2012	-	-	+	-	-	+
Elliot 2016	-	+	+	-	-	+
Horvath 2013	+	+	+	+	+	+
Huang 2015	-	-	+	-	-	+
Hyden 2016	-	-	+	-	-	+
Jones 2015	-	-	-	+	-	+
Ko 2013	+	+	+	-	+	+
Lampkin 2016	-	-	+	+	-	+
Mendizabal-Burastero 2016	-	-	-	+	-	+
Munro 2016	-	-	+	-	-	+
Patel 2016	+	+	-	+	+	+
Rhodes 2011	-	+	+	+	+	+
Rhodes 2016	-	+	+	+	+	+
Roberts 2015	-	-	+	-	-	+
Sun 2015	+	-	-	-	+	+
Tang 2016	+	+	-	+	+	+
Washington 2016	+	+	+	+	+	+
West 2015	-	-	+	-	-	+
Young 2013	+	+	-	+	-	+
Young 2015	+	+	-	+	+	+
Zou 2013	+	-	+	-	-	+

Note: (+) means low risk of bias and (-) means high risk of bias.



Results



26 studies
18 observational
studies
8 RCTs

Note: Countries in blue denote the ones with nationwide research and red dots denote states/cities/areas of study location.



15 articles

Generic social media platforms



10 articles

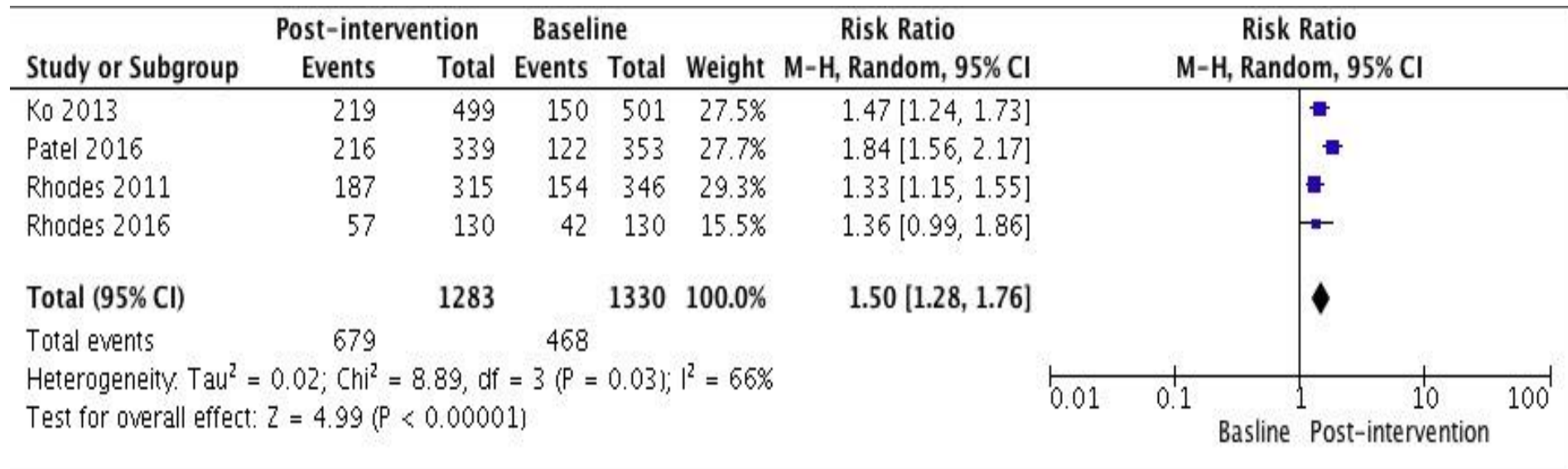
Gay APPs

Key Population: MSM population

Roles of social media	Functions	N of studies
Establish virtual communities	Emotional & informational support	10 studies
Disseminate information	Informational support	9 studies
Deliver services (e.g., HIV self-testing kits)	Instrumental support	9 studies
Develop intervention materials	Instrumental support	1 study

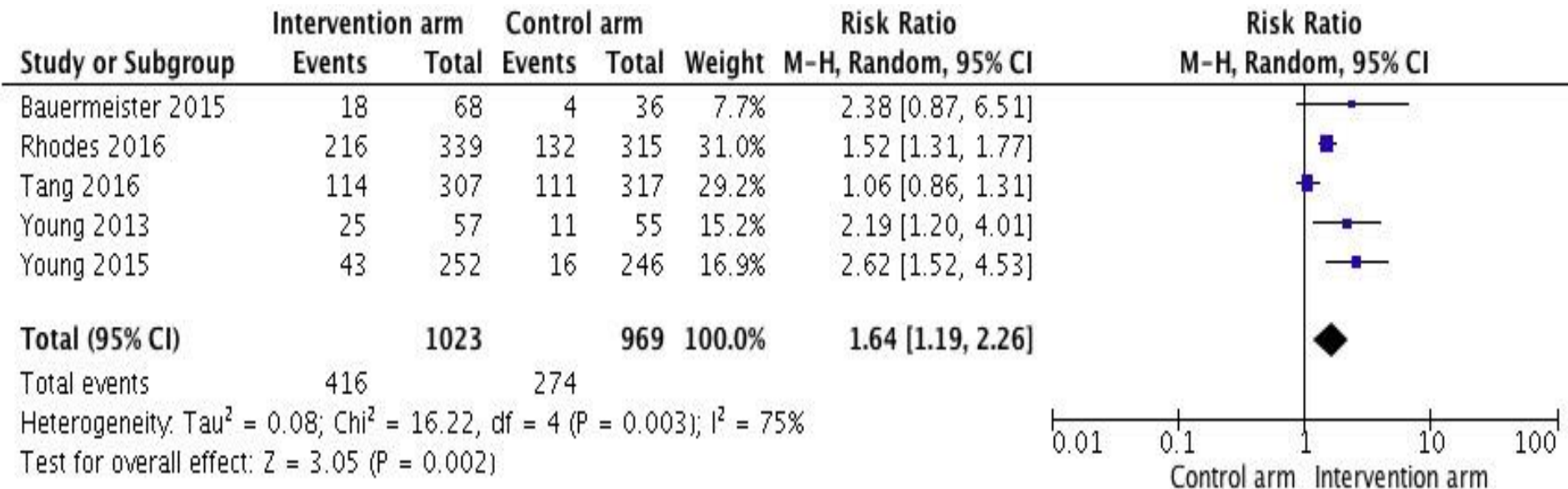
Meta-analysis

Comparison between studies with baseline and post-intervention data on HIV testing ($N=4$)





Comparison of HIV testing uptake between the intervention arm and the comparison arm in the randomized controlled trials (N=5)





	Total participants/ Web page views	Request testing kit	Request percentage (95% CI)
Elliot 2012	363	132	36.36 (31.58 - 41.43)
Elliot 2016	66,579	10,323	15.50 (15.23 - 15.78)
Young 2013	112	36	32.14 (24.21 - 41.26)
Total	67,054	10,491	15.65 (15.37 - 15.92)

	Request for testing kit	Return testing kit	Return percentage (95% CI)
Brady 2014	14,212	8,187	57.61 (56.79 - 58.42)
Elliot 2012	132	73	55.30 (46.79 - 63.52)
Elliot 2016	10,323	5,696	55.18 (54.22 - 56.13)
Young 2013	36	11	30.56 (18.00 - 46.86)
Total	24,703	13,967	56.54 (55.92 - 57.16)

	Total participants tested	HIV positive	Positive rate (95% CI)
Brady 2014	8,187	111	1.36 (1.13 - 1.63)
Elliot 2012	73	4	5.48 (2.15 - 13.26)
Elliot 2016	5,696	96	1.69 (1.38 - 2.05)
Total	13,956	211	1.51 (1.32 - 1.73)





Conclusion

- ❖ Social media interventions were effective in promoting HIV services, especially in increasing HIV testing rates, in high-income countries, and aimed at MSM population.
- ❖ Different roles played by social media were identified.
- ❖ Social media can help achieve “90-90-90” UNAIDS goal.





Discussion

- Studies in this review primarily focused on MSM populations.
 - **Other key populations?**

- HIV testing is the main focus of social media interventions.
 - **Enhance ART adherence through social media?**

- Existing social media platform or standalone platforms?





Acknowledgement

- Support of this work was provided by the National Institutes of Health (National Institute of Allergy and Infectious Diseases 1R01AI114310); UNC-South China STD Research Training Centre (Fogarty International Centre 1D43TW009532); UNC Center for AIDS Research (National Institute of Allergy and Infectious Diseases 5P30AI050410); Shenzhen U Grant (18QNFC46); Guangdong Youth Talent Project (2017WQNXCX129); and the Bill & Melinda Gates Foundation to the MeSH Consortium (BMGF-OPP1120138). This publication was also supported by Grant Number UL1TR001111 from the National Center for Advancing Translational Sciences (NCATS) at the National Institutes of Health.
- We acknowledge Jennifer S Walker, UNC, a Chapel Hill librarian, for conducting the initial search for studies, and Gabriella Stein, undergraduate student, UNC, Chapel Hill, for her support at the early stage of this study.
- The findings and conclusions in this study are those of the authors and do not necessarily represent the views of the World Health Organization.





Thank you!

Cao B., Gupta S., Wang J., Hightow-Weidman L., Muessig K. Tang W., Pan S., Pendse R., & Tucker J. (2017). Social media interventions to promote HIV testing, linkage, adherence, & retention: A systematic review and meta-analysis. *Journal of Medical Internet Research*, 19(11)

