



CHARISMA Mobile:



a digital empowerment counseling resource to help women use PrEP safely

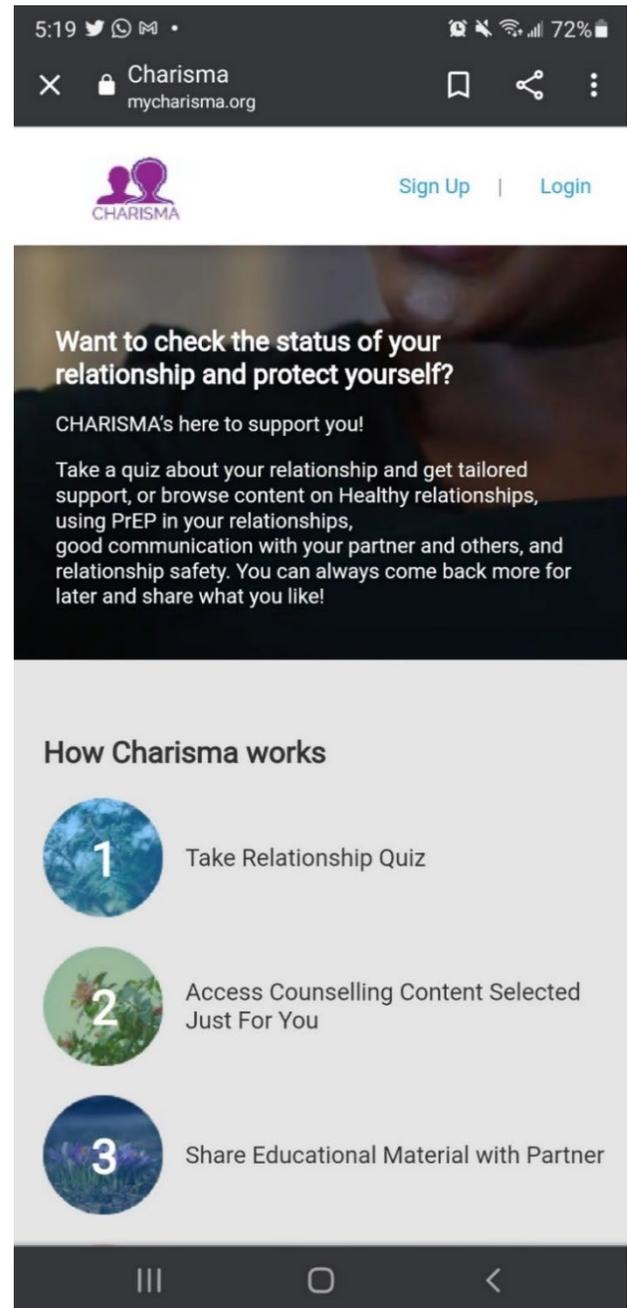
Technical Brief | June 2022

Summary

CHARISMA is an empowerment-based, counselor administered intervention designed to help women use PrEP in the face of relationship challenges. CHARISMA was adapted into a mobile-friendly, self-administered website, CHARISMA Mobile.*

Harmful relationship dynamics with male partners and exposure to intimate partner violence (IPV) can greatly challenge women’s ability to effectively use oral pre-exposure prophylaxis (PrEP) and other antiretroviral-based HIV prevention methods. These often stem from inequitable societal gender norms that simultaneously may limit the decision-making power of women about their own health. Men, in some contexts, may see PrEP use by their partner as an indicator of mistrust or infidelity in a relationship or a sign that the partner is HIV positive. Seeking partner support for PrEP use is important to women, but women may not feel equipped to face conversations about fidelity and trust with their partner, and in some cases, may fear violence if they raise the issue.^{1,2,3,4,5,6,7}

The CHARISMA [intervention](#) is designed to help women overcome relationship challenges through an assessment tool and tailored counseling, support, and service referrals. The intervention was developed and tested in Johannesburg, South Africa, with cisgender women ages 18–45 who reported having male sexual partners. CHARISMA intervention materials are available to be delivered by providers in health care settings or self-



Screenshot of the homepage of CHARISMA Mobile

* CHARISMA is an acronym for “Community Health Clinic Model for Agency in Relationships and Safer Microbicide Adherence.”



administered by women on their own time, in the case of the online version. The study for the self-administered version expanded the content to include more information relatable to adolescent girls and young women (AGYW). This brief explains more about why and how you can use the online *CHARISMA Mobile* content to support women and AGYW in your area, projects, and clinics, including how you can adapt it for different audiences or contexts. You can find more about the provider-administered version on [PrEPWatch](#).

CHARISMA Mobile Purpose

The reasons for the creation of the self-administered CHARISMA Mobile intervention from the provider-administered materials were multifold:

- To help women identify key relationship barriers to PrEP use
- To offer empowerment-based skills to overcome relationship barriers to PrEP use, such as whether and how to disclose, communication skills, and safety planning for those in dangerous relationship contexts
- To connect women to further support and resources
- To increase accessibility to the CHARISMA content and intervention in places where providers may have less time to deliver relationship-focused PrEP counseling

Key Features and Functions

The *CHARISMA Mobile* content for AGYW lives on open-source platforms, where you can access and adapt content to your audience. The [front end](#), [back end and content management system](#), and [application programming interface](#) are all accessible. The content is also available on the South Africa Department of Health's [B-Wise](#) website, where AGYW and all young people can use it as is. It includes the following key features:



Still image from [CHARISMA video](#) on the B-Wise South African National Department of Health website.

1. **A relationship quiz**, called the "HEART" in CHARISMA and "Find out more about your relationship" on B-Wise, is designed to get young women and young people thinking about the health of their relationships.
2. **Targeted counseling content**. This covers healthy relationships, partner abuse, communication, and PrEP disclosure and is specifically recommended based on the relationship quiz. Content on B-Wise was adapted for use by all young people, not just AGYW, and includes images and videos. All content is available for public browsing, whether recommended by the relationship quiz or not.
3. **Referral resources**. A critical component of CHARISMA, including in the mobile version, is that it aims to connect women to human resources. The relationship quiz and counseling pages on B-Wise provide contact information for [loveLife](#) counselors — trained health experts in South Africa who provide advice and counseling on relationships, HIV, sex, and love — as well as links to service facilities.
4. **Male partner resources**. Men are an important part of the puzzle and need information, too. A critical part of the process is raising [their awareness of PrEP](#).

Additional features available in open source:

In addition to content on B-Wise, the *CHARISMA Mobile* website included features that are available in the source code for adaptation. These features include:

- An option to log in to save progress, with embedded security measures and instructions to women to avoid including personal information like email or phone numbers and automatic logouts when women navigate away from the website
- A series of videos for older women in live-in relationships: [Healthy Relationships](#), [Partner Communication](#), [PrEP Disclosure](#)

How to Use *CHARISMA Mobile*

The mobile website and original content are also available for use in and adaptation to other settings or populations through open-source code. In low connectivity settings, print the paper versions of *CHARISMA* found in the [toolkit](#) and have them available within clinics and other locations where PrEP may be available. To use the website and content appropriately for your audience and location, you should:

1. **Do your background research:** *CHARISMA* and the subsequent *CHARISMA Mobile* content were developed following detailed formative work with women in Johannesburg, South Africa. Consider what may be different with your audience — whether it is someone other than women (e.g., men, transgender women, sex workers) or will be implemented in a different context (e.g., family planning clinics, other health service locations) or setting (e.g., by providers in a clinic, or in another city or country). It is important to engage your relevant stakeholders to answer critical questions about how they would use the site and which language and images reflect the population. See more about our [process](#) for some key tips on ways of doing this.

2. **Purchase IT infrastructure:** The *CHARISMA* content will need to be hosted at an independent, secure web-hosting facility and provided with an easily recognized domain name. Consider using a global cloud hosting vendor for greater data security rather than a country- or government-owned server.

3. **Develop the website:** Recruit a developer to adapt the open-source code and host it on the new server. Then adapt the functions to meet your program needs. Customize the site branding to appeal to your target audience and adapt the content to fit your program. Consider translation of site content into local languages and/or inclusion of things like audio content for less literate audiences.

Click the Links Below to Access Counseling Content

Healthy Relationships

Unhealthy Relationships

PrEP Disclosure

Discreet PrEP Use

Abuse

Communication

4. **Launch and field test:** Connect with local clinics to ask if they can test the functionality of the adapted site before it is launched. Familiarize clinic staff with site functions and content, and recruit small groups of clinic clients to test the site for glitches. After correction of the glitches, prepare for a larger scale rollout by advising clinic staff to recommend the site to relevant patients and print flyers to advertise the site.
5. **Evaluate and update:** Ongoing monitoring and routine updates to the site are necessary for optimal functionality. Review feedback from clients and make updates to the site based on relevant feedback. You may also be interested in designing your own phases of research to further develop and test the site or to test its effect on women's PrEP use or relationship outcomes.

For more information or support on developing or using the materials, contact: Dr. Elizabeth Montgomery, emontgomery@rti.org

Development of *CHARISMA Mobile*

The multiphase adaptation process from CHARISMA to *CHARISMA Mobile* used human-centered design and participatory methods through workshops, web development “sprints,” cognitive interviews, beta testing, and pilot testing. All phases of development were conducted in Johannesburg, South Africa, with women ages 18–45 who were using or interested in

PrEP and consented to participate. The work was reviewed by the University of Witwatersrand Human Research Ethics Committee. The table below outlines the three phases of website development with a description of the participants, structure, and outcomes of each phase.

First phase: Adaptation of in-person counseling content and translation into mobile content		
Participants	Methods	Outcomes
<ul style="list-style-type: none"> • Six AGYW, ages 18–24 • Eight adult women, ages 25–45 • All had experience with CHARISMA in-person intervention 	<ul style="list-style-type: none"> • Two two-day workshops (separated into AGYW and adult women) • Participatory activities: persona creating, prototyping, user journey mapping • Co-facilitated by CHARISMA research team, South African National Department of Health PrEP mobile platform technical partners, and website development team 	<ul style="list-style-type: none"> • Phone storage issues led to development of website instead of downloadable mobile app • Prioritization of safety features around website login, such as automatic log outs after a period of time • Women wished for interactive content and use of words and phrases that may resonate with young, urban South Africans, with these suggestions reviewed at a website inception meeting and built into site development “sprints” and goals
Second phase: Beta testing		
Participants	Methods	Outcomes
<ul style="list-style-type: none"> • 55 AGYW, ages 18–24 • 26 adult women, ages 25–45 • Women eligible if they were naive to the CHARISMA intervention, sexually active, either eligible for PrEP or current PrEP users, and spoke English 	<ul style="list-style-type: none"> • Facilitated one-on-one beta testing sessions with observational feedback interviews • “Think aloud” process used while women went through each step of online intervention • Survey questions from Mobile App Rating Scale (MARS) and similar resources • Four waves of 15–24 interviews each • Results analyzed by go/no-go criteria • Nine domains measured: engagement/usability, functionality/feasibility, aesthetics, information, safety, confidentiality, and overall satisfaction/acceptability 	<ul style="list-style-type: none"> • Iterative design updates made throughout • Eight domains met preferred targets and the HEART self-administration meeting the minimum acceptable target (82.5% of total women comprehended without repetition, and 49% self-administered in less than 15 minutes) • Overall, site well-accepted and relevant, engaging, and feasible to administer

Third phase: Pilot testing

Participants	Methods	Outcomes
<ul style="list-style-type: none"> 73 AGYW, ages 18–24 86 adult women, ages 25–45 Same eligibility criteria as beta testing 	<ul style="list-style-type: none"> Assess “real world” acceptability and feasibility Participants access website, take HEART quiz, and browse content on their own device at any location Following site interaction, given brief interviewer-administered survey face-to-face or over the phone Used Single Ease Question (SEQ), Standardized User Experience Percentile Rank Questionnaire (SUPR-Q), and “usefulness” sub-items from the Adoption Likelihood Factors Questionnaire (AFLQ) 	<ul style="list-style-type: none"> Website accessed mostly at own or someone else’s home or at Wits RHI clinic; 70% used Wi-Fi and 30% used cell phone data plan 200 users accessed the site for an average time of 14 minutes 145 of 200 site users visited the HEART relationship quiz High acceptability, usefulness, safety, and confidentiality feedback results Women willing to share site more broadly to peers

Pilot Testing Results*

Domains	Scores and Standard Deviation (SD)		
	Age 18 - 24	Age 25+	Overall
Usefulness	4.54 (.39)	4.53 (.38)	4.53 (.39)
Safety	4.51 (.53)	4.49 (.55)	4.5 (.54)
Mean confidentiality	1.75 (.77)	1.75 (.84)	1.75 (.81)
Mean CHARISMA specific	4.42 (.51)	4.46 (.51)	4.43 (.51)
Overall star rating	4.47 (.76)	4.7 (.58)	4.6 (.68)



High scores across all domains with an average overall score of 4.61 out of 5.

Pilot testing surveys drew standardized website assessment scales and customized questions.

Scoring for the scales in the results graphic were out of 5.

Higher scores indicated better responses, except for confidentiality, where it was the opposite.

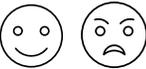
The CHARISMA specific composite score measured how much the website was perceived as meeting needs around relationship issues and PrEP use.

* *More details on the process can be found in a forthcoming paper on the development of CHARISMA Mobile.*

Recommendations for Other Features

Feedback from women during beta and pilot testing suggested future development of *CHARISMA Mobile* should continue to integrate

more interactive features for greater engagement with the platform and for varying levels of literacy. Suggested features included:

 <p>Daily mood check-ins</p>	 <p>Content review progress bars</p>	 <p>More audio content</p>	 <p>Ability to make direct calls and messages</p>	 <p>Ability to geolocate service providers</p>	 <p>Ability to share information on social media</p>
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Icons from thenounproject.com

CHARISMA Mobile is funded by Digital Square, a PATH-led initiative funded and designed by the United States Agency for International Development, the Bill & Melinda Gates Foundation, and a consortium of other investors.

References

- Hartmann M, Palanee-Phillips T, O'Rourke S, Adewume K, Tenza S, Mathebula F, et al. The relationship between vaginal ring use and intimate partner violence and social harms: formative research outcomes from the CHARISMA study in Johannesburg, South Africa. *AIDS Care*. 2019;31(6):660-6.
- Hartmann M, Otticha S, Agot K, Wanga B, Oginga F, Minnis A, et al. Unpacking the role of gender-based violence as a barrier to pre-exposure prophylaxis use among adolescent girls in the DREAMS program in Kenya through qualitative storytelling [abstract]. Presented at International Workshop on HIV & Adolescence. 2019. Nairobi, Kenya.
- Roberts ST, Nair G, Baeten JM, Palanee-Phillips T, Schwartz K, Reddy K, et al. for the MTN-020/ASPIRE Team. Impact of male partner involvement on women's adherence to the dapivirine vaginal ring during a phase III HIV prevention trial. *AIDS Behav*. 2020;24(5):1432-1442. doi: [10.1007/s10461-019-02707-1](https://doi.org/10.1007/s10461-019-02707-1).
- Roberts ST, Haberer J, Celum C, Ware NC, Mugo N, Cohen CR, et al. Intimate partner violence and adherence to HIV pre-exposure prophylaxis (PrEP) in African women in HIV serodiscordant relationships: a prospective cohort study. *J Acquir Immune Defic Syndr*. 2016;73(3): 313–22.
- Palanee-Phillips T, Roberts ST, Reddy K, Govender V, Naidoo L, Siva S, et al. Impact of partner-related social harms on women's adherence to the dapivirine vaginal ring during a phase III trial. *J Acquir Immune Defic Syndr*. 2018;79(5):580-589. doi: [10.1097/QAI.0000000000001866](https://doi.org/10.1097/QAI.0000000000001866).
- Lanham M, Wilcher R, Montgomery ET, Poole R, Schuler S, Lenzi R, et al. Engaging male partners in women's microbicide use: Evidence from clinical trials and implications for future research and microbicide introduction. *J Int AIDS Soc*. 2014;17(3 Suppl 2): 19159. Available from: <https://onlinelibrary.wiley.com/doi/full/10.7448/IAS.17.3.19159>
- Stadler J, Delany-Moretlwe S, Palanee T, Rees H. Hidden harms: women's narratives of intimate partner violence in a microbicide trial, South Africa. *Soc Sci Med*. 2014;110:49-55. doi: [10.1016/j.socscimed.2014.03.021](https://doi.org/10.1016/j.socscimed.2014.03.021). Epub 2014 Mar 22.