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Does Accountability Affect Adherence to Moisturizer Treatment in Atopic Patients with Xerosis?

Stuti Prajapati
Rowan University

Christina Kontzias
Wake Forest School of Medicine

Steven Feldman
Wake Forest School of Medicine

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Does accountability affect adherence to moisturizer treatment in atopic patients with xerosis?

Stuti Prajapati MS^{1,2}, Christina Kontzias BS², Steven R Feldman MD, PhD^{2,3,4}

1. Rowan-Virtua School of Osteopathic Medicine, Stratford, NJ, 2. Center for Dermatology Research, Department of Dermatology, Wake Forest School of Medicine, Winston-Salem, North Carolina, 3. Department of Social Sciences & Health Policy, Wake Forest School of Medicine, Winston-Salem, North Carolina, 4. Department of Dermatology, University of Southern Denmark, Odense, Denmark, Rowan S

Background

- Xerosis cutis is characterized by pruritus, scaling, and inflammation due to impaired skin barrier. Xerosis is common in atopic dermatitis (AD)¹
- Adherence depends on multiple factors such as complexity of treatments, age, gender, disease understanding and accountability.²
- Accountability is a psychobehavioral construct, referring to the expectation that one must be responsible for their actions or inactions.
- Reminder-based interventions may serve as an accountability tool to improve patient adherence.³

Objectives

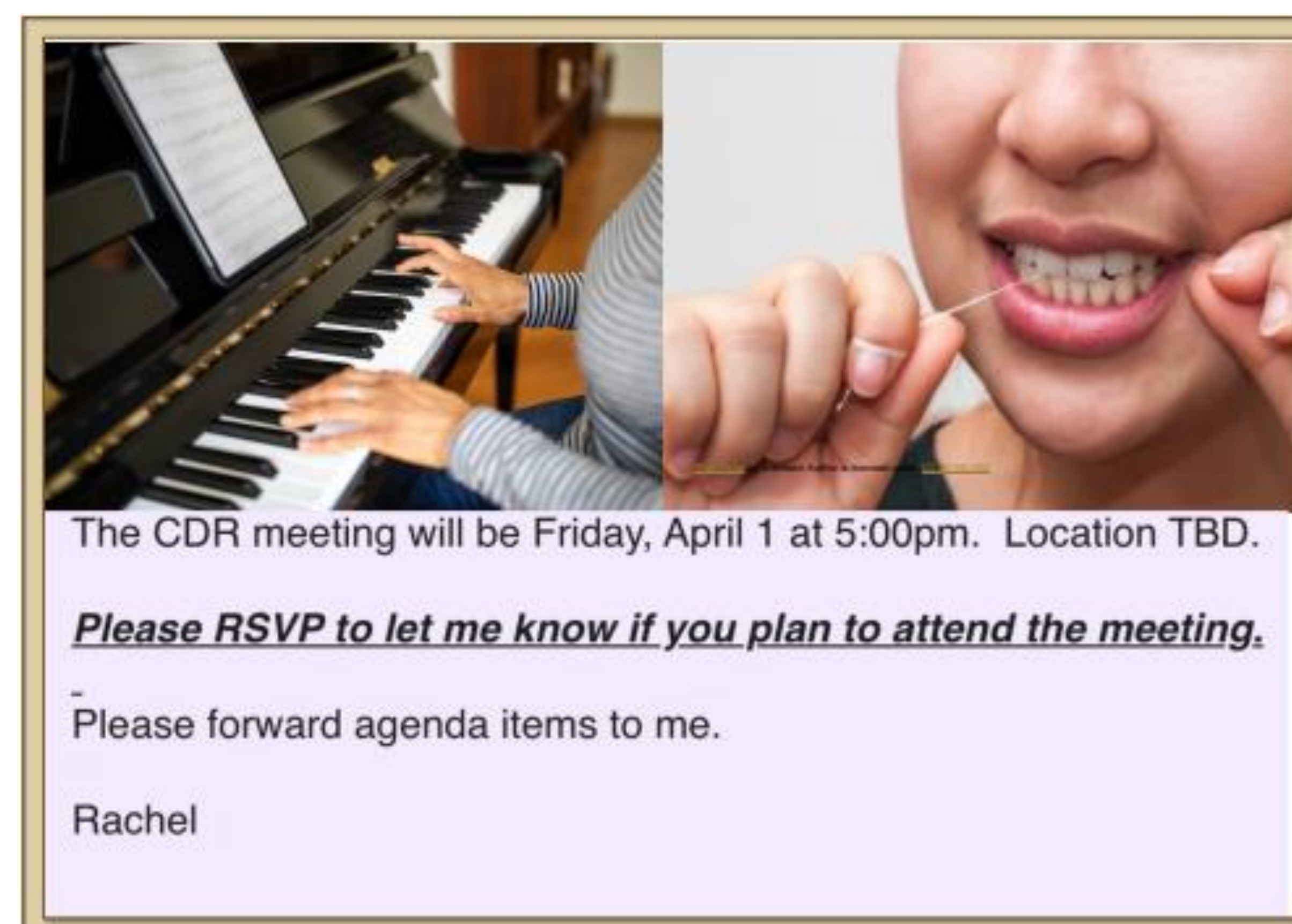
- We sought to assess whether interventions expected to improve accountability would be associated with improved adherence to xerosis treatment.

Method

- This is a prospective study of 30 patients diagnosed with xerosis with AD enrolled from Atrium Health Wake Forest Baptist dermatology clinics.
- Patients were given Cetaphil Eczema Restoraderm Soothing Moisturizer (Galderma) with an electronic monitor to record adherence and asked to apply it once daily for three months.
- Subjects were randomized into one of three arms: the control group (n=12), the electronic interaction group (n=10), or the GPSkin group (n=6).
- Electronic group received weekly email survey during the study to assess their Cetaphil use, while the GPSkin group received the GPSkin Barrier a device that measures skin moisture and were instructed to obtain skin moisture measurements daily.
- Accountability was assessed at baseline and the final visit using the validated Accountability Measurement Tool (AMT).

	1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
I feel guilty if I do not follow my dermatologist's recommendations.					
I am afraid of disappointing my dermatologist by not following his/her recommendations.					
I am concerned that my dermatologist may be disappointed if I do not follow his/her recommendations.					
I feel proud showing my dermatologist how well my psoriasis has improved.					
I am pleased letting my dermatologist know how well I have used my psoriasis medication.					
I look forward to letting my dermatologist know how well I have used my psoriasis medication.					
All in all, I feel accountable towards my dermatologist.					
An upcoming office visit with my dermatologist motivates me to follow my dermatologist's recommendations.					
I would feel guilty if [I thought] my dermatologist believed I wasn't following his/her directions.					
I don't want to let my dermatologist down by not using my psoriasis medicine well.					
I am concerned of how I would be perceived if my dermatologist thought I didn't do a good job using my psoriasis medication.					
I try to use my psoriasis medication regularly because I have a dermatologist visit coming up.					

Table 1. Accountability Measurement Tool (AMT)



Example of Accountability Reminder

Results

- Mean adherence scores for the control was 56 (SD=25); electronic interaction group 34 (SD=39) and GPSkin group 19 (SD=19).
- Control group had higher adherence compared to the electronic interaction group (p=0.044), while no difference was observed between the control and GPSkin groups or between the electronic interaction and GPSkin groups (p=0.11 & p=0.83, respectively).
- Mean follow-up AMT scores were highest in the GPSkin group (48.0), followed by the control group (46.3), and the electronic interaction group (44.1); although these differences were not significant (p=0.366).

Conclusion

- The electronic reminders and feedback tools were intended to promote accountability. However, to the extent that this small sample is representative, weekly surveys and daily feedback on skin moisture did not appear to promote treatment adherence.
- This may be because these interactions did not involve direct social consequences, and therefore may not impact patients' sense of accountability.
- Although these techniques were unsuccessful, interventions involving live social interactions with medical staff may be more fruitful.³

References

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