Why don't skin cancer patients listen to me?

Non-adherence to melanoma prevention recommendations

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What do we want our MM patients to do at home?

- Avoid Sun (Primary Prevention)
- Self skin examination (Secondary Prevention: Early detection)
Wide range of adherence

- Review of 91 studies
- Sunscreen adherence: 7 to 90%
- Yearly SSE rates: 23 to 61%

Mediators of Adherence

Intention

• The reason behind a particular action

• Driven by many factors
  – Normative pressure
    • Attitudes
    • Subjective norms
  – Positive effect
  – Cues to action
  – Reinforcement
Intention: Attitudes

Common attitudes
• Towards sunscreen (sticky, time consuming)
• Perceived risk of developing skin cancer
• Perceived benefits of sun protection vs sun exposure

Derm response
• Alternative sun protection behaviors
• Talk about individual risk
• Vitamin D comes in supplements
**Intention: Subjective norms**

**Peer pressure**
- Tan look ("white fat looks worse than tan fat")
- Are people around patient using sunscreen?

**Response**
- De-emphasize tan attractiveness
- Are self tanners a good idea?
- Educate re photo-aging
- Increase social norms of sun protection behaviors (rash guards, umbrellas...)
N=382

More likely to use an umbrella

• After viewing the collage ($P<0.001$)
• If recommended by a dermatologist

Independent predictors of social acceptability

• Age
• Had not lived in another country
• Use sun protective clothing use
• No sunscreen use
• Skin color, ethnicity & education NOT predictors
Intention: Cues to action

- People
- Location
- Timing

Self skin exam
- Running/drinking/breakfast buddy check back
- Computer for photo check
- Same day of the month

Sunscreen
- Spouse reminds
- Exit of the home: put bottle so remember to apply before leaving the house
- Make part of AM habit
Intention: Reinforcement

- Provider provides encouragement at clinic visit (vs. reprimand)
- Provider gives clear, directed instructions
  - How much (shot glass full)
  - When (20 min prior to going out)
  - Where (air conditioned area)
- Written action plans (handouts)
Confidence

- Response efficacy: Confidence that the behavior actually works
- Self-efficacy: Confidence in performing a health behavior
Improving Response efficacy

- Confidence that the behavior actually works
- Provide education from literature
  - Sunscreen usage helps for 10 years hence
  - Using total body photos saves on unnecessary biopsies
Improving Self-Efficacy

• Confidence in performing a health behavior

• Providing how-to information
  – Nurses to educate
  – Handouts
  – Videos

• Using teachbacks to assess understanding
Improving Self-efficacy: MM apps

- Algorithms to detect worrisome lesions
  - Skinvision
  - Doctor Mole
  - UMSkincheck

- TeleDerm/Tracking
  - Mole Detect Pro (Mole Detective)
  - SpotCheck (photo of mole to MD)
  - FotoSkin
  - Mole Mapper
Text reminders: RCT

- Weekly informational texts & monthly reminders
- Control: only SSE educational materials at baseline
- Subjects were surveyed on examination of 7 body sites
- Texting group examined sig more body parts at follow-up compared to baseline
Text reminder RCT

Text msg subjects also had greater increase in (vs. no texting)

- Cancer awareness and knowledge
- Cancer worry
- Self-efficacy (confidence in ability to perform SSE)
- Response efficacy (confidence that SSE are worthwhile)
Barriers

• Obstacles that prevent an individual from performing an action
  – Physical
  – Logistical
  – Social/environmental

• Even if have intention, skills, and confidence to perform that behavior
Removing Barriers

- Using stick/spray sunscreens when hard to use lotion
  - Public area; sandy beach; kids faces
- Using clothing instead of sunscreen
  - no need to re-apply
- Being available by phone or email if pt has questions
Removing Barriers

• Being available for spot check of worrisome lesion on SSE
  – Next day appointment
  – TeleDermatology
  – TeleDermoscopy
Feasibility and Efficacy of Patient-Initiated Mobile TeleDermoscopy for Short-term Monitoring of Clinically Atypical Nevi

29 pts that completed FU
Derm identify 1 lesion of interest
Baseline and 3-4 mo FU visit
  - Routine (Nikon) dermoscopic image
  - iPhone image (DermScope, Canfield)
Management Decision
  - Office-based: Routine visit
  - TeleDerm: both iPhone images
TeleDermoscopy: Results

• **Feasibility**
  – 97%: Image pair evaluable

• **Diagnostic concordance**
  – 97% agreement
  – Kappa statistic: 0.87 (ideal >0.7)

• **Patient receptiveness**
  – High degree confidence to take image
  – Shorter wait time & potential for more frequent monitoring
  – WTP $20-$500 for mobile dermatoscope
TeleDermoscopy

• Patient needs dermoscopy unit
• Secure Cloud to store images
• Process to share/transmit with provider
• Attachments to iPhones
  – 3Gen DermLite DL1 basic ($300)
  – FotoFinder Handyscope ($943)
References


References


References

- Fishbein, M., et al., *Can we explain why some people do and some people do not act on their intentions?* Psychology, Health & Medicine, 2003. 8(1).
References


