73.

FAKE INSTAGRAMS FOR REAL CONVERSATION: A THEMATIC ANALYSIS OF THE HIDDEN SOCIAL MEDIA LIFE OF TEENAGERS

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Purpose: Instagram has grown over the years to become one of the most popular social media platforms, and three quarters of teens who use social media use Instagram. In recent years, "Finstas", or "fake" Instagrams have grown in popularity among US teenagers. Finsta accounts are subsidiary Instagram accounts with highly selected audiences where owners can post material that is not associated with their main account. Public Twitter posts (tweets) can provide insight into communication about these clandestine accounts not available through Instagram due to the inherent private nature of these accounts. This exploratory study uses natural language processing (NLP) techniques on tweets about Finsta accounts to gain insight into this phenomenon.

Methods: An R-script was developed to pull data from the Twitter API to capture tweets longitudinally that were in English, from North America, and specifically mention some form of the stem and lemmatized word "Finsta." As there are no current studies on Finsta accounts, a comprehensive thematic analysis was then performed on the corpus of tweets to develop qualitative insights on this phenomenon. A quantitative process involved further cleaning and removing of stop-words to develop a Ngram frequency chart of the lemmatized words in the corpus of tweets to better understand the ways in which people were communicating about Finsta accounts.

Results: 10,000 tweets containing the word "Finsta" were pulled from the Twitter API. After a comprehensive cleaning process, 5,159 tweets were then analyzed qualitatively to identify themes as a preliminary inquiry into this relatively new phenomenon. Themes identified within the corpus were: a desire for privacy compared to their main account, a place to share information that may be politically incorrect or would get users in trouble if shared on accounts with wider viewership, and a place to showcase real life. Ngram frequency words highlight similar words common to social media, "follow," "like," and "post" being amongst the most popular; however, within this corpus there are high frequencies of the words, "private," "sad," "nudes," "spam," "rant," "exposed," "emotional," and "outlet," tied to contextual themes indicating that Finstas may be an outlet for emotional catharsis in a "safe space." A Finsta user may have twenty followers (as opposed to 1000 on their main account) that include their closest friends. They may post blurry pictures without filters, with long captions detailing their negative emotional state. This sensitive content is posted with the underlying assumption that their friends will keep this information private.

Conclusions: Preliminary analyses indicate that Finstas are a new way for teens to connect with peers in a controlled space online, where they can truly express themselves. Additionally, there is also a great deal of gossip, exhibitionism, risk-taking, and other attention-seeking behaviors typical of adolescence that manifest in ways not seen on users' primary accounts. Finsta accounts fulfill a vital role in the lives of adolescents looking for ways to authentically connect, share, and create community that is not offered through traditional uses of social media.

Sources of Support: NYU CAMS Undergraduate Internship

74.

A BRIEF INTERVENTION TO INCREASE ADOLESCENT KNOWLEDGE, AWARENESS, AND COMFORT DISCUSSING CONTRACEPTION USING AN ONLINE EDUCATIONAL TOOL

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Purpose: Despite comparable rates of sexual activity, the United States leads the developed world in teen pregnancy. Studies suggest that insufficient knowledge about and lack of access to contraception contribute to these elevated rates. Methods of effectively disseminating accurate information to adolescents, as well as encouraging discussions with knowledgeable adults and peers, are clearly needed. This study evaluated the potential of a website, bedsider.org, to increase adolescent knowledge, awareness, and comfort discussing contraception in a high school student population.

Methods: Participants were recruited from a large urban high school in the Southeast United States to participate in an online survey with an imbedded brief educational intervention. Variables included demographics, self-perceived knowledge of contraception, and likelihood of use of various information sources about contraception, including key individuals. The subsequent intervention component directed participants to the target website in order to locate answers to knowledge questions about six different contraceptive methods. The final portion re-assessed initial questions about self-perceived knowledge and information sources, prompting participants to reevaluate their answers in light of the use of the target website, and assessed participant perceptions of the website and its acceptability. Students who provided both contact information and correct answers to the knowledge questions were eligible to receive a ten dollar gift card redeemable at a local retail establishment appealing to this population.

Results: 136 students completed the survey during the one week enrollment period, with average age of 16.3 (range from “under 14” to 18) and gender of 72% female and 28% male. The majority (81%) of respondents identified as white, with 12% Asian, 6% Black/African American, and 1% Native Hawaiian or other Pacific Islander, and 18% as Hispanic/Latino. The most trusted source of information on contraception was doctor or medical provider, with "internet" also ranked highly. Participants who reported low baseline knowledge pre-test reported increased self-perceived knowledge post-test, while the reverse was true in that those who reported higher baseline knowledge reported lower self-perceived knowledge post-test. Only 17% gave correct answers for all six contraceptive questions, which increased to 31% correct when excluding one question for which the answer was difficult to find on a mobile device due to formatting. 96% of respondents thought the website would be "somewhat” to “extremely” helpful for an adolescent who is, or is considering becoming, sexually active, with 46% choosing the highest response (“extremely helpful”; 10/10 on Likert scale), with 80% “somewhat” to “definitely” likely to recommend the site to a friend.

Conclusions: Our findings demonstrate that this population would find an internet-based information source acceptable for contraceptive information, and in particular, bedsider.org. We suspect that those participants who had an accurate and low estimation of their baseline knowledge learned new information from this brief educational intervention, and those who had an elevated self-perceived baseline knowledge realized how much they didn’t know– possibly supported by the low rate of correct answers to the knowledge questions. Our study suggests that the target website, bedsider.org, could be an effective and acceptable method of disseminating accurate contraceptive information in a school based setting.

Sources of Support: None

75.

USE OF YOUTH-CENTERED MOBILE HEALTH APPLICATION, HEALTH-E YOU/SALUD ITU, TO REDUCE DISPARITIES IN CONTRACEPTIVE KNOWLEDGE, ACCESS AND UNINTENDED PREGNANCY AMONG SEXUALLY ACTIVE LATINA ADOLESCENTS

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Purpose: There are significant disparities in contraceptive knowledge, access and use among Latina adolescents. More than half Latinas become pregnant before age 20 and face a disproportionate burden of adverse consequences. Health-E You/Salud iTu is an interactive, individually tailored mobile health application (app) in Spanish and English to increase Latina adolescents' access to comprehensive contraceptive information, patient-centered decision-making support and uptake of effective contraception to reduce disparities in unintended pregnancies. This study examines participants' contraceptive knowledge, self-efficacy and interest in effective contraception at baseline and immediately after using the app.

Methods: This is part of a larger longitudinal, cluster randomized control trial (CRCT) in 18 school based health centers (SBHCs) serving high need communities across Los Angeles County. App development was based on social cognitive theory and informed through iterative prototyping with Latina adolescents and clinicians. All adolescent girls receive an iPad upon registration. Controls complete a sexual health survey. Health-E You obtains consent and eligibility: Latina, aged 14-18 years, sexually active, not currently pregnant and not using long acting reversible contraception (LARC). The app assesses common contraceptive misconceptions/knowledge (via a myth-busters game) and self-efficacy. It provides decision-making support by assessing attitudes about life planning, preferences, prior experience, barriers to use, and potential contraindications that are important when considering contraception. Participants can choose to learn more about any method and watch video vignettes of clinicians and youth. Upon completion, the user selects the method(s) most interested in. Information from the app is printed for the clinician prior to seeing the youth.

Results: The study enrolled 1,374 sexually active Latinas (697 intervention; 677 control) with a mean age of 16.4 years; 90% spoke Spanish; 97% reported it was very or somewhat important to avoid becoming pregnant. Yet at baseline, 30% used nothing or an ineffective method (withdrawal/rhythm), 41% condoms, 30% pills, patch or ring and 0% LARCs. Of the 98% who completed the app, 75% were recommended a LARC and 25% the pill, patch or ring. After app use, interest in using an effective method significantly increased to 62% for pill//patch/ring; and to 28% for LARCs ($p<.001$). Contraceptive non-use (nothing/withdrawal/rhythm) declined by 61%. There were also significant increases in contraceptive knowledge (3.38 to 4.94 items answered correctly out of 7, $p<.001$) and self-efficacy in talking with their doctor about birth control (7.96 vs 8.37; $p<.001$); having the information needed to choose birth control (7.90 vs 8.41; $p<.001$) and using birth control correctly (8.03 vs 8.45; $p<.001$). The app recommends condoms to everyone; however, there was no increase in condom use self-efficacy.

Conclusions: Health-E You/Salud-iTu was isuccessfuly integrated into SBHCs as a "clinician extender" to provide personalized contraception education and decision making support prior to the face-to-face encounter. There were significant increases in app users' knowledge, self-efficacy and interest to use effective contraception. Qualitative data indicate the app better prepares adolescents to discuss contraception with their provider and improves the efficiency and effectiveness of patient-centered contraceptive care. **Sources of Support:** PCORI #AD-1502-27481 and in part by MCHB AYAH-RN UA6MC27378 & T71MC00003.

76.

REFINING A COMPUTERIZED SEXUAL HEALTH SCREENING TOOL AMONG ADOLESCENTS PRESENTING TO THE EMERGENCY DEPARTMENT

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Purpose: Adolescents are disproportionately affected by STIs and frequently use the emergency department for health care. Many STIs are asymptomatic and early diagnosis can prevent long-term reproductive health complications. However, STI testing is not routinely conducted in the ED setting. We previously developed and validated a computerized sexual health screening tool to help identify adolescents at risk for STI. The purpose of this analysis was to measure the test characteristics of items and combinations of items in the questionnaire for prediction of STI.

Methods: This was a secondary analysis of a randomized trial that utilized an audio computer-assisted self-interview to risk stratify adolescents seeking care in the ED for STI risk and provide clinical decision support to clinicians based on STI risk. The questionnaire included items assessing following risk factors: sexual activity, symptoms of STIs, condom use at last sex, more than 1 sexual partner in the last 3 months and prior diagnosis of a STI. Participants between the ages of 14-19 completed the computerized screening tool and provided a urine sample for Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (GC) testing. The tool classified patients as high risk for an STI if they were sexually active and had self-reported any of the risk factors. We calculated test characteristics, including sensitivity and the area under a receiver-operator characteristic curve (AUC), for the tool and for each risk factor and combination of risk factors.

Results: The STI positivity rate in this study was 5.5% (35/635). The sensitivity of screening high risk for an STI on the sexual health screening tool was 83% and the AUC was 0.77. Not using a condom at last sexual encounter resulted in a sensitivity of 62% and the AUC was 0.74. When examining different combinations of factors; we found having symptoms of a STI AND not using condoms at last sex had a sensitivity of 37% and an AUC=0.65. Conversely, having symptoms of a STI OR not using condoms at last sex had a sensitivity of 77% and an AUC=0.71. Not using a condom OR having multiple sex partners in the last three month had a sensitivity of 69% and an AUC=0.74. Combining three OR four of the risk factors resulted in an increased sensitivity of 91%; however, the AUC decreased to 0.68.

Conclusions: During the study, the sexual health screening tool classified patients as high-risk if they were sexually active and had any of the previous mentioned risk factors. When we tried to refine this tool, we were able to create combinations that would increase the sensitivity; however this resulted in a decrease in the AUC. The tool currently requires patients to answer 5 questions; if time was an issue this tool could be refined and would perform fairly similarly.

Sources of Support: National Institute of Child Health and Human Development (NICHD) K23 award (HD070910) (M.K.G)

78.

TEEN INTEREST IN ELECTRONIC HEALTH TIPS AND CLINICAL ENGAGEMENT IN PRIMARY CARE

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Purpose: Prior research has suggested that adolescents are interested in using technology to access health-related information, but that it can be challenging for them to find credible information (Park & Kwon, 2018; Radovic et al., 2018). We developed an eHealth screening and feedback tool for use in primary care that includes an option for adolescents to view health tips across different areas. In this study, we sought to examine how viewing such tips correlated with indicators of health self-efficacy and health engagement with the provider.

Methods: Prior to their annual well-child appointments in pediatric primary care settings, 306 adolescents aged 13-18 were given the Check Yourself tool. The tool included screening questions across six health areas, personalized feedback on the teens' health behavior (including educational information), and an option to receive additional health tips for each area. Adolescents also completed a health self-efficacy measure, and indicated how interested they were in discussing screening results with the provider, whether they would like to discuss a health related goal with the provider, and whether they wanted to receive additional health resources by email. We calculated the proportion of youth who requested to view health tips on the tool and used Pearson chi-square analyses to examine how these youth compared in their health self-efficacy and health engagement to those who did not view the tips. We also examined demographic differences (gender, age, and race) between the groups.

Results: A total of 210 adolescents (69% of those in the study) elected to view health tips for at least one area on the Check Yourself tool. The most commonly viewed health tips selected by youth were as follows: physical activity (60%), healthy eating (32%), emotions (26%), sexual health (24%), safety (21%) and substance use (19%). We found that youth who viewed tips were more likely to be interested in discussing their screening results (44% vs. 27%; $p=.005$) and specific health goals with their provider (80% vs. 57%, $p<.001$). No differences were found between groups in health self-efficacy or interest in emailed health resources. Gender, age, and race were comparable between groups.

Conclusions: There is a large subset of teens who are interested in health information, with particularly high desire for tips on physical activity and healthy eating. Youth who opted to view health-related tips as part of an electronic health screening tool indicated higher levels of interest in health engagement in the clinical visit as they were more willing to discuss screening results and health goals with their provider, suggesting a possible enhancement effect of technology in augmenting clinical care.

Sources of Support:

79.

QUALITY OF ONLINE HEALTH INFORMATION REGARDING CHRONIC DISEASE TRANSITION

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Purpose: Transition of young adults with chronic illnesses from pediatric to adult care is a vulnerable time for patients. Preparing youth with health-related knowledge is important. While the Internet has provided patients a primary source to search and gather health-related knowledge, there is a wide spectrum in the quality of information available on the Internet. This study evaluated the quality of online health information regarding this transition period.

Methods: Data were collected from December 2017 to January 2018 using the 5 most commonly used search engines. Keywords and keyword combinations included “transition,” “chronic disease,” “chronic illness,” “pediatric to adult care transition,” “health care transition,” “transition readiness,” “tools,” “medical transition,” and “resources” that people may use while searching for information on the Internet regarding transition to adult healthcare were selected. The first 20 links for each search term were included. Incognito window was used so that previous searches did not influence results. Websites that met predetermined inclusion/ exclusion criteria were included in analyses. Websites were classified as academic/educational institution, health department, hospital/private clinician, professional body, or other (includes Wiki, WebMD, and etc). Flesch Reading Ease (FRE) Score was used to evaluate website readability. A novel 12-item transition-specific content tool was produced to evaluate website content. Website quality was evaluated assessing for the presence or absence of the HONcode certification and using the EQIP tool. A high quality website was defined as having an EQIP Score ≥ 75%. Website quality and content were scored independently by two research assistants.

Results: We identified 1808 websites using the selected keywords and search engines. Of those, 65 websites met the inclusion criteria. Websites came from an academic/educational institution (9.2%, n=6), health department (21.5%, n=14), hospital/clinic (15.4%, n=10), professional society (44.6%, n=29), and other sources (9.2%, n=6). Website analysis revealed few HONCode certifications (3.1%, n=2), low EQIP scores (mean = 60.8 ± 4.9), few high quality websites (18.5%, n=12), low FRE score (mean, 46.7 ± 15.3), low website content score (mean, 35.7 ± 10.2). HONCode certified websites did not have higher FRE scores (p= 0.63). The inter-rater reliability in EQIP ratings was good (Pearson R=0.738). Hospital/private clinician websites had the highest EQIP scores and content scores. Every website met the EQIP criteria of using everyday language, short sentences and a respectful tone (n=65). Most websites did not have a space for readers to take notes (n=9) and lacked contact information for healthcare services (n=16) as well as the date the website was produced (n=25). The items most frequently included in the content scores were skills and efficacy (n=39), self-management (n=36), knowledge (n=34), navigating health systems (n=32), and self-advocacy (n=31).

Conclusions: Although seeking health care information online is very common, the overall quality of information about transition on the Internet is poor. Steps should be taken to insure that health information published on the internet meets criteria for quality. By doing this, youth going through transition will be prepared by having competent expectations, knowledge, skills, efficacy, and support available on the Internet.

Sources of Support: None

80.

ROLE OF TELEMEDICINE IN THE TRANSITION FROM PEDIATRIC TO ADULT CARE

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Purpose: Telemedicine is increasingly used in multiple clinical settings. However, few institutions have utilized telemedicine as a tool for transitioning adolescents and young adults (AYA) from pediatric to adult providers. In order to improve transition preparation and streamline hand-offs between pediatric and adult neurologists, we developed and piloted a telemedicine program to transition AYA with epilepsy, enabling the patient/family, pediatric neurology provider, and adult neurology provider to meet virtually for a transition sign-out. We tested the feasibility and acceptability of using telemedicine for this purpose.

Methods: Patients were identified by pediatric neurologists as ready to transition. The pediatric neurology social worker contacted patients/families on this registry to gauge interest and to schedule the telemedicine visit. Information hand-offs during the visits were structured using I-PASS: Illness severity, Patient summary, Action list, Situational awareness, and Synthesis by receiver. Two post-visit surveys were implemented. A patient/family survey assessed the helpfulness of hearing a signout between their pediatric neurologist and new adult neurologist, its accuracy, and perceived confidence of the adult neurologist. Pediatric and adult neurologist surveys assessed call content accuracy and overall value of the call.

Results: From September 2017 - June 2018, 10 telemedicine visits were conducted in 5 quality improvement cycles. The initial 2 calls were conducted in person during the last visit with the pediatric neurologist. All subsequent calls were conducted with the patient at home: 6 via telephone conference calls and 2 via secure video chat. Call length was initially 45 minutes and included a detailed medical history. In an effort to make these calls more feasible: content was pared down to: 1) a brief sign out by pediatric provider; 2) an introduction to adult provider, their practice expectations and logistics, and 3) time for patient/family questions. These calls lasted approximately 10 minutes. Post call survey response was poor (N=4). Of those, 75% thought it was helpful to hear the conversation between providers, 75% thought the adult provider received adequate information. However, only 50% of patients felt confident that the adult provider could manage their disease in spite of this hand-off. Pediatric (89%, n=8) and adult (78%, n=7) providers reported that telemedicine was an acceptable format for transition sign-out; however, the adult providers reported needing to review pediatric electronic medical records for 67% (n=6) of patients despite the telemedicine visit.

Conclusions: Patient and caregivers found the telemedicine sign-out to be helpful though it did not improve their confidence in the adult provider. From a provider perspective, telemedicine was helpful tool for the patient but did not provide sufficient clinical and/or psychosocial information. Value-added adoption of telemedicine for transition of care requires an iterative process to identify optimal content and process – which is highly dependent on the clinical subject matter and participant needs and expectations.

Sources of Support: