Prevention vs. Need: Youth Perception of Anticipatory Guidance in Oregon SBHCs

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Objectives

1. Understand the degree to which SBHC staff are discussing anticipatory guidance topics with youth ages 12-19
2. Assess youth perception of their need for prevention discussions with SBHC staff
3. Identify other factors significantly associated with anticipatory guidance topic discussions and perception of whether needs were met

Methods

Survey Design & Implementation

The Oregon SBHC State Program Office requires that all certified SBHCs conduct annual surveys with youth ages 12 to 19 to assess their satisfaction with the quality of services received and overall experience during the SBHC visit. Of the 65 certified SBHCs in 2013-14, six were excluded from the survey requirement due to low utilization for the target age group. Depending on utilization numbers from the prior school year, each of the remaining 59 SBHCs was required to submit between 30 and 60 completed surveys (mean number of required surveys = 32). Eighty-seven percent of SBHCs (n=40) used an iPad to administer the surveys; 13% (n=6) used traditional paper surveys. A pilot evaluation conducted in 2012 revealed no significant differences between surveys administered via iPad vs paper. At the time of data extraction, 46 SBHCs had submitted 1,052 surveys (data collection continues through June 30, 2014).

The survey utilizes a simple random sampling design; sites are instructed to either flip a coin (paper survey) or utilize an electronic coin flip (iPad) to determine whether a student is eligible to complete the survey. SBHC staff are asked to approach youth at the conclusion of their SBHC visit and to avoid inviting the same student to participate more than once.

Survey Content

The survey covers a wide range of topics including:

- Demographics
- Physical and mental health status
- 12-month utilization of the SBHC
- Overall comfort and satisfaction with SBHC
- Availability of alternate sources of health care
- Estimated absenteeism overall and for health-related reasons

The focus of this analysis is on the youth experience of anticipatory guidance on a wide variety of topics. Delivery of prevention messages has been a survey topic for several years, but the issue of youth perception of need was newly added in 2013-14[1, 2]. Youth were asked a) whether they received anticipatory guidance; and b) their level of need on twelve important preventive health topics:

"In the past 12 months, did a Health Center Staff talk to you about any of the following?

a. Tobacco
b. Healthy eating (breakfast, milk, fruits, veggies)
c. Drugs
d. Brushing & flossing
e. Feelings (sad, angry, anxious)
f. Alcohol
g. Sexual health
h. Safety & injury prevention
i. Healthy body weight
j. Exercise (sports, walking, dancing)
k. Healthy relationships
l. Your school performance and grades"

For each of the topic areas, the available answer choices were:

- YES, and I got what I needed
- YES, but I did not get what I needed
- YES, but I didn't need it
- NO, but I need to talk about that
- NO, I do not need to talk about that

Results

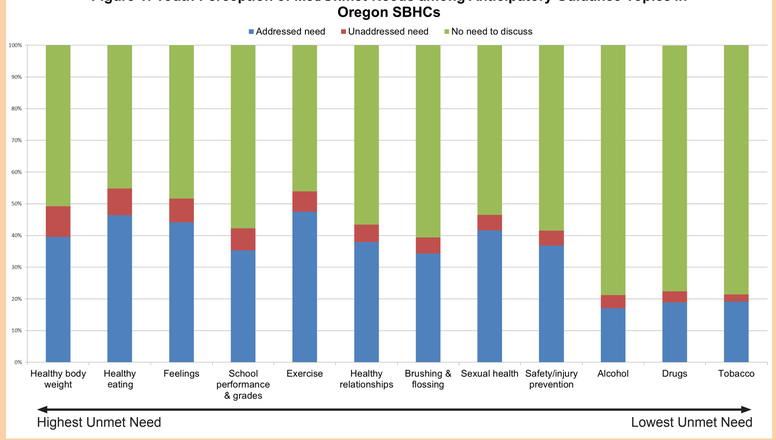
Data were analyzed using Stata SE 12; no weighting was applied but school ID was used as the primary sampling unit for analytic purposes. Of the 1,052 respondents, 65% (n=684) were female. The average respondent age was 15.5 years; 47.6% of respondents came from urban SBHCs and 52.4% from rural sites. More than 8 in 10 youth respondents (83%) reported having visited the SBHC more than once in the past 12 months; 11% reported visiting at least 10 times. Nearly half of respondents (48.5%) reported excellent or very good physical health; 42.9% said they had excellent or very good mental health status.

The prevalence of anticipatory guidance topics reported by youth ranged from a low of 36% (alcohol) to a high of 65% (healthy eating). Similar levels of variation were seen in whether the guidance was needed at all; of those who reported discussing preventive health topics with SBHC staff, youth were most likely to report that discussions related to exercise (78%), feelings (76%) and healthy relationships (75%) met their existing needs. Youth who discussed substance use topics were far less likely to say a genuine need was met (drugs and tobacco - 49%; alcohol - 47%); instead, they reported there was no need at all.

Figure 1 presents the combined results of the question for each prevention topic area - the percent of youth that reported whether they had a need to discuss the topic, and whether the need was met or unmet. Overall, healthy body weight (10%) and healthy eating (8%) were the topics with the highest levels of unmet needs while alcohol (4%), drugs (4%) and tobacco (2%) had the lowest rates of unmet need. The substance use topics also had the highest rates of no perceived need to discuss (drugs – 78%; alcohol and tobacco – 79%).

Results

Figure 1: Youth Perception of Met/Unmet Needs among Anticipatory Guidance Topics in Oregon SBHCs



We conducted bivariate analyses between anticipatory guidance topic delivery and each of the following survey variables:

- Sex
- Urban/rural SBHC location
- Age
- # of visits to SBHC
- SBHC as usual source of care
- Physical and mental health status
- Utilization of ER/urgent care in past 12 months
- Unmet physical or mental health need

Multivariate logistic regression was then run for those variables with a statistically significant bivariate association (see odds ratios in Table 1). As expected, increasing utilization of the SBHC and identifying the SBHC as the usual source of care were strongly related to receiving prevention messages in most topic areas.

Table 1: Logistic Regression Odds Ratios Related to Prevention Topic Discussions

In the past 12 months, did SBHC staff talk to you about...?							
Topic	Male	Urban	Age	# Visits	SBHC usual source of care	Unmet physical health need	Unmet mental health need
Healthy eating				1.57	1.69		
Exercise		1.48		1.50	1.48		
Feelings	0.61	1.66		1.90	1.51		2.32
Sexual health	0.57	2.01	1.34		1.80		1.63
Healthy body weight				1.62	1.48	1.51	
Safety/injury prevention		1.36			1.53	1.38	
School performance/grades		1.49		1.43			
Healthy relationships	0.74	1.74		1.50	1.37		1.45
Brushing & flossing		1.74	0.85			1.50	
Tobacco					1.60	1.70	
Drugs	1.51			1.37	1.59		1.76
Alcohol							1.49

Key Findings

Data are preliminary and some measure of caution is appropriate in interpreting the results. Nevertheless, we find these to be among the most intriguing and potentially important findings:

- Youth reporting poorer physical and/or mental health status were no more likely to receive anticipatory guidance on any topic area than those with better self-reported physical or mental health
- Males were significantly less likely than females to report receiving guidance in the areas of sexual health (OR = 0.52 [0.4 - 0.8], p < 0.01), feelings (OR = 0.61 [0.4 - 0.9], p < 0.001), and healthy relationships (OR = 0.74 [0.6 - 0.96], p < 0.05); they were significantly more likely to report receiving guidance related to drugs (OR = 1.51 [1.1 - 2.0], p < 0.01)
- Youth in urban SBHCs were significantly more likely than those in rural SBHCs to hear messages on exercise (OR = 1.48 [1.02 - 2.15], p< 0.05) feelings (OR = 1.62 [1.1 - 2.4], p < 0.05), sexual health (OR = 2.01 [1.3 - 3.1], p < 0.01), safety (OR = 1.44 [1.1 - 1.9], p < 0.05), grades (OR = 1.49 [1.1 - 2.1], p < 0.01), healthy relationships (OR = 1.74 [1.2 - 2.5], p < 0.01) and oral health (OR = 1.73 [1.2 - 2.5], p < 0.01)
- Among youth who received anticipatory guidance:
  - Males were significantly less likely than females to report that their need was addressed in the areas of healthy eating (OR = 0.61 [0.4 – 0.9], p < 0.05), exercise (OR = 0.59 [0.4 – 0.9], p < 05.), sexual health (OR = 0.52 [0.3 – 0.8], p < 0.01), healthy body weight (OR = 0.45 [0.3 – 0.7], p < 0.001), and school performance/grades (OR = 0.65 [0.4 – 0.99], p < 0.05)
  - Youth in urban SBHCs were significantly more likely than those in rural SBHCs to report that their need was met in the areas of feelings (OR = 2.14 [1.4 – 3.3], p < 0.01), sexual health (OR = 1.78 [1.1 – 2.9], p < 0.05), and brushing/flossing (OR = 1.62 [1.03 – 2.5], p < 0.05)
- Among youth who didn't receive anticipatory guidance
  - Being male (OR = 2.67 [1.2 – 6.2], p < 0.05) and having an unmet mental health need (OR = 6.77 [3.0 – 15.4], p < 0.001) were extremely strong predictors for reporting an unaddressed need to discuss healthy relationships
  - Youth in urban SBHCs were almost 2.5 times as likely as those in rural SBHCs to report they had an unaddressed need to discuss school performance/grades (OR = 2.45 [1.2 – 5.2], p < 0.05)

Conclusions and Next Steps

This is the first time that we have examined the relationship between the delivery of prevention health messaging and youth perception of the need for such messaging. SBHCs are uniquely positioned to offer such anticipatory guidance to adolescents due to their focus on youth-friendly services, confidentiality and convenient access. Delivering such messages is a key component of a comprehensive adolescent well visit as outlined in the American Academy of Pediatrics' Bright Futures[3]. In addition, Oregon SBHCs are required to offer the comprehensive well visit to any established patient (three or more visits per year) and report on this as a Key Performance Measure to the State Program Office. One factor we did not examine was the relationship between an SBHCs rate of adolescent well visits and the percent of youth receiving anticipatory guidance at that SBHC.

One of the most interesting findings was related to differences reported by urban SBHC youth versus those at rural sites. The fact that urban youth were both more likely to report receiving guidance on a variety of topics and that their need was met once guidance was delivered has several different potential explanations. One could be related to the differing needs of the client populations; another could be the extensiveness and availability of risk assessment tools being used in the SBHCs; yet a third unexamined factor could be related to staffing mix/capacity at the sites and whether this differs by urban/rural in a way that could help explain these results.

The differences in sex could similarly be attributable to several different factors. First, there are known differences in male and female prevalence of risk factors that would support these results. For example, males tend to have higher rates of drug use than females[4], which would explain why males were more likely than females to report having a discussion with SBHC staff regarding drug use. However, the fact that male youth reported a very strong unaddressed need in healthy relationships could signal a missed opportunity for SBHC staff to pursue this topic with their male adolescent patients.

Important next steps include examining ways to get provider feedback to a similar set of questions, adjusting the survey design to help ensure tighter fidelity, and looking at another year of data for replicable results. We will also share these findings both at the state level and with individual sites to help them improve awareness of student feedback on their practices regarding anticipatory guidance delivery.

Limitations

This analysis has several limitations that should be noted. First, this data only reflects the youth perspective. It lacks any information from the clinical side that would illuminate motivations behind the decision to provide or not provide guidance. Second, we know anecdotally that the adherence to survey administration protocol varies. For example, how closely SBHC staff are observing the random coin toss to determine survey participation is unknown. While we urge sites to wait until after the student's visit to administer the survey, we know at times it may be offered at the start of the visit and refer to past visits. Lastly, as previously noted, this is a single incomplete year of data on questions that have never before been administered and analyzed, and should be treated as preliminary data.

References

[1] Based on the validated 2012 YEHS! (Youth Engagement with Health Services) survey conducted in Colorado and New Mexico SBHCs. http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251863315117

[2] Sebastian RA, Ramos MM, Stumbo S et al (2014). Measuring Youth Health Engagement: Development of the Youth Engagement with Health Services Survey. J of Adolescent Health, S1054-139X.

[3] http://brightfutures.aap.org/

[4] https://public.health.oregon.gov/BirthDeathCertificates/Surveys/OregonHealthyTeens/results/Pages/Results2013.aspx

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