SAMHSA's Center for the Application of Prevention Technologies (CAPT)

Preventing Youth Marijuana Use: Changing Perception of Risk

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[Gisela Rots]: And thank you all, again, for joining us. We are glad you joined us for this webinar. It's a part of SAMHSA's National Prevention Week, which started on May 15 and continues until May 2. National Prevention Week is a national observance dedicated to increasing public awareness of and action around mental and/or substance use disorders. And we here at the CAPT, or the Center for the Application of Prevention Technologies, are honored to be a part of this. So, today's webinar, again, hosted for you by the CAPT, is on preventing youth marijuana use—changing the perception of risk.

I'm Gisela Rots and I am joined by my esteemed colleague, Lourdes Vázquez. And I will give you a little bit more of an introduction to both of us in just a moment.

But before I move on, I'd just like to highlight for you that there is a Q&A pod on the left-hand side of your screen. I encourage you to enter any questions that you might have there, both tech questions and content questions. We have a team working with us on the back end that will be working through those as we go through the webinar. So, please put your questions in there. We will have some time for questions and answers at the end of the audio piece. We'll make sure that we share responses that are relevant for everyone publicly, but we also have the ability to answer one-on-one if you have a specific question.

So, just a piece of information: this webinar is being recorded and archived. And as you registered, you will be getting the recording to this webinar through our registration portal: CAPT Connect. You should also have received materials this morning: the PowerPoint, as well as various handouts that are all a part of this webinar. And we're hoping that these will help you move through the information with us as we go along today.

In terms of objectives, as the title of today's webinar indicates, we'll be focusing on factors and strategies related to the perception of risk and harm of youth marijuana

use. So, we'll be talking—we'll be describing some of those attitudes, beliefs, and norms about marijuana and how that influence is abused. We'll identify those specific strategies, and risk and protective factors, for preventing youth marijuana use, again focusing on those related to perception of harm. We'll be sharing with you some information about how to access some of our CAPT decision-support tools. And we'll talk a little bit about key considerations when we address youth marijuana use if there are no evidence-based strategies that are available.

Obviously, we will be spending a good portion of today's time on that second objective, around the factors and the strategies. We will say that we are kind of in the midst of a changing landscape as it relates to marijuana in general. And while we acknowledge that, we are going to be looking at the prevention research related to that and focusing on youth use, because I think we can all agree that preventing youth marijuana use is something that we all need to focus on.

In terms of your presenters, I am honored to be joined by Lourdes Vázquez. Lourdes is the team lead for the Southeast Resource Team of the CAPT—again, the Center for the Application of Prevention Technologies—where she provides training and TA, or technical assistance, to our state and jurisdiction clients and their subrecipients—so, often community members, community prevention coalitions. Prior to joining the CAPT, Lourdes oversaw substance abuse and mental health promotion programs in both urban and rural high-need communities at the state and community levels. Lourdes, do you want to say hello?

[Lourdes Vázquez]: Oh, thank you. Thank you, Gisela, and welcome, everybody, to today's webinar.

[Gisela Rots]: Thanks, Lourdes. And I'm Gisela Rots. I'm the team lead for the Northeast Resource Team of the CAPT. As Lourdes says, I provide training and technical assistance for state clients and their community subrecipients. Previous to joining the CAPT, I worked to prevent misuse of various substances, including marijuana, at the community level.

So, I think Lourdes and I both bring a perspective of both the state and the community levels, and we hope to be able to share some of that with you today.

A couple of notes: again, this presentation highlights research findings related to the prevention of youth marijuana use. It does not endorse the selection of any specific risk or protective factor strategies to address this problem. We do hope you use the Strategic Prevention Framework to find those.

However, questions related to funding allocation and the approval of interventions or strategies should really be focused towards your funding agency, whomever that is.

In terms of caveats and considerations: again, this presentation will be focusing on preventing marijuana use among youth aged 12-17. We are not going to be talking about marijuana use among young adults ages 18-20, or adult marijuana use, or policy. And a lot of that has to do with the fact that there are literally hundreds of us together on this webinar today, and so all of our situations are slightly different. And regardless of any one of our individual policies or policies of our community, I think we can all agree again that, on that continuum, preventing youth marijuana use is of incredible importance.

So, that's kind of why we're focusing on this. It's also where the research that the CAPT has done focuses. So, with all of that said, I would now like to hand it over to Lourdes.

[Lourdes Vázquez]: Well, thank you, Gisela. And thank you all for joining us today on the webinar. And Gisela, you may recall when we started planning this webinar, we thought that it would be a very good thing to start the conversation providing the context where prevention of youth marijuana use takes place today.

So, as we all know, the landscape of marijuana laws and norms has been changing and continues to change as we speak today. You may see this map where there is color-coding. We have, as you know, 24 states and the District of Columbia permitting medical use of marijuana. And when you put this in numbers, this represents almost half of the population in the United States.

In addition to that, you see the light green ones, four states and D.C., have legalized recreational use, representing almost 6 percent of the population in the United States.

And what's the projection by the end of 2016? So, it's expected that 58 percent of the population could reside in a jurisdiction that permits medical use, recreational use, or both.

So, what does this changing landscape mean to all of us who are in prevention? This requires prevention providers to have a deep understanding of the particular community conditions that they live in associated with youth marijuana use and also to have the capacity to make really sound decisions about those community conditions they will target, and especially on the strategies they will be selecting to address those

issues.

That's kind of the context that Gisela and I were talking about that was important to provide today. So, we decided, also, to tie the conversation today using this road map that you have in front of you. We will follow it through the conversations.

First, what we will do is review some data about marijuana use by youth at the national level. That will give us a glimpse of the problem. Gisela, then, will follow with a discussion of the risk and protective factors associated with youth marijuana use. And we will end the conversation today with a discussion of key elements of the strategies and interventions that have shown outcomes related to youth marijuana use. What do we say? We will be unpacking some of those strategies.

So, we invite prevention practitioners to use a similar road map when they do planning, starting with the assessment of the issue, understanding the risk factors, and then selecting their intervention. So, before moving forward, I would like to invite all the participants on the webinar today to think about and respond to the following question: why is it important to address youth marijuana use? Why is it important for you all to address youth marijuana use?

And you can write your response in the box provided in the portal. Let's see. I would like to see those questions coming up—those responses.

"Affects brain development, especially for youth."

Yes.

"The perception of risk is dropping."

"Some say it's a gateway to other drugs. It can lead to abuse of other drugs."

"Affects the growing mind."

"Affects the development in general."

"It leads to addiction."

"It can lead to abuse of other substances."

Excellent. Excellent. Many other responses are coming. Yes.

"Understanding of the risk is reduced, is being reduced."

"Developmental concerns," some of you are saying.

"Affects overall health."

"Some teens think this is not a big deal at all," and "Can also damage social functioning and life functioning."

OK. So, we have more than—almost 150 responses here. Thank you all for those responses. These are awesome.

So, gathering this information and looking at some themes, it seems like, due to a changing landscape, youth do not see marijuana as harmful. That is one of the points I see you responding to. And also, the effect it is having in overall development of youth. Thank you so much for that response, the responses you provided.

So, let's now take a look at some trend data of marijuana to really have a good understanding of the issue as it permeates today. So, in terms of data, between 2011 and 2016, use increased among 12th and 10th graders—you may see in the chart that we're presenting right now. It leveled a little bit for 12th graders and dropped for 10th graders. Among eighth graders, you may see there was some decline in 2011 and 2012, but then increased again in 2013.

So, it's evident that the issue is still present. You will also note the differences in terms of gender. It is also important to know that even though there is a similar upward trend in the use among males—you're looking to the green line—use among females continued increasing—that's the red line—while males leveled.

So that brings us to the question: if there is something in particular that we should do—something in regards to prevention with young females.

So, we have seen an increase in use, but how about the perception of risk? While use during the past month among females and males has increased over time, with some kind of leveling among males, perception of risk—that is, the belief that youth have that using marijuana can result in harmful effects—has significantly decreased since 2007. So, one is increasing and the other one is diminishing.

In terms of perception of harmfulness—looking at this data nationally for smoking

marijuana regularly—while perception of risk has declined, perception of harmfulness, as well, in terms of using marijuana regularly, also has declined through the years.

And how about availability? While perception of risk declined, perception of availability is high and has remained considerably stable through time, although there has been a slight decrease here and there.

So, summarizing the data, the indicators that we have shared today in terms of use and some of the risk factors: marijuana use is higher among 12th graders and males, but use has increased among females. And perception of harm is lower among older teens, while perception of availability is higher among this same group. Although some decline in use among 11th graders has been shown, and leveling among 12th graders, we can conclude that use remains high for both groups. So, this data provided just a glimpse of the problem that we are confronting right now.

So, we are coming back to our road map. We just reviewed some national data related to youth marijuana use, perception of harm, and availability.

We will now begin the discussion of the risk and protective factors associated with youth marijuana use. And for that I will invite you all to respond to a poll, another poll that we have today.

Think about your community. So, which factors are influencing youth marijuana use in your community? And you can provide the responses to the poll. You can make a choice. OK.

We see positive attitudes toward marijuana use has been one of the factors that are influencing youth marijuana use in your community, followed by, let's say, having friends with youth marijuana use and community norms favorable to substance abuse. We also see others saying, in terms of the open-ended, easy access. Some say medical marijuana has some influence, policy changes at the community level, enforcement, dual diagnosis. So, utilizing marijuana to reduce anxiety—and then Gisela will touch base a little bit on that one.

Good. Awesome. So, let's see how we'll finalize. Positive attitudes towards marijuana use seems to be one of the major factors that are influencing youth marijuana use in your communities, followed by—it's kind of a trend here—having friends who use marijuana—you think that's one of the major ones. Awesome.

So, thank you so much for that discussion. And I would like, then, to bring Gisela to the

discussion now. Gisela, it's all yours.

[Gisela Rots]: Great. Thanks, Lourdes. Thank you for walking us through that. I think you certainly set this up well for us to talk about why it's important to be focusing on the risk and protective factors related to the perceptions of harm. I think we saw that both in the answers to the poll, as well as in the data that we saw: that it's the perception of harm that seems to be decreasing, as the use seems to be increasing.

And the other thing that's important to note about focusing on the perception of harm is that there are risk and protective factors related to the perception of harm across what we call the socio-ecological framework, right? So, not just both, but at the individual level, at the relationship level, at the community level, and at the societal level, there are relevant risk and protective factors.

And so, it is incredibly helpful to be thinking about this compendium of risk and protective factors, as best practices in prevention really tell us that we should be looking to address factors across this framework. And so, we'll spend some time identifying those for you today.

All right. So, let's start at the individual level. And again, we're going to go through these relatively quickly, just because of time. However, I'd just highlight for you that you do have access to both the presentation and the relevant decision-support tool, or annotated bibliography, in the e-mail that you received earlier today with the materials. So, that is a resource for you to come back to.

But let's look at those risk factors at the individual level. Many of these are related to what you all answered in the poll just now: positive attitude towards use, intention to use, the belief that marijuana use will help relieve tension and help folks relax. And this particular risk factor is really related to the expectancy theory, which is what you anticipate will happen if you use a particular substance. It's well-researched with alcohol, and it's clearly coming up with marijuana as well: positive attitude towards drugs, perception of greater availability of marijuana.

And I think what we saw when you all were answering in the other category is that a lot of these—if we hadn't listed them out, you would have listed them out as being relevant to what's going on in your community conditions around marijuana use. These are all related to, at the individual level: what's the perception of youth marijuana use, and towards drugs more broadly, right?

So the fourth bullet down—positive attitude toward drugs—is not just related to only

marijuana use, which, again, I think a lot of you highlighted in one of our earlier polls when we talked about why is it a danger and thought about this idea of the gateway drug, if you will.

So, moving on from the individual level: then once we move into family, we've got two relevant factors. I should note that these citations that are made—all of those citations on these slides—you can find the detailed information about at the end of the PowerPoints.

One thing I would like to highlight in terms of this family history of or current family use of marijuana, so a question of: have parents ever used? Well, this article really measured the history of marijuana use or current use among family and parents. The take-home is really about youth expectations about attitudes towards marijuana use and the likelihood of punishment.

So, it's important to remember that it's not just about family history, but then how that translates for young people in the family home. In this particular case, for families with a history of use, parents reinforcing negative consequences to use, and that youth use is unacceptable in the family in that environment, and that that is true among their children, and that's an incredibly important piece to this puzzle, right?

So, it's not that family history of use in and of itself means that youth are going to use. It's kind of helping parents to think through how they can move that information along, and their own agency in helping to prevent use among their own children.

So, then we move to this peer relationship level, looking at these relevant risk and protective factors, both on having friends who use marijuana as well as perceived use of marijuana among friends. One thing I'd like to highlight for you here is that it is interesting because one of the articles actually found that it's not just about close friends who use, but peer groups. Right?

So, then that's the idea that peers—so not just a youth's close friends, but those around them in class, in school—also have an impact on their potential use of marijuana, and that this peer influence piece is a factor that goes into young adulthood. So, it's not just that it's important to be thinking about how we can impact the perception of use among peers and the acceptability among peers, but how we can help to really make sure that we're protecting youth from that throughout high school.

So, then we get to the community level.

And again, I know I'm flying through this because of time considerations. So we, again, encourage you to put questions in the Q&A if you have them.

But thinking about the community risk factors, here again, looking at community norms favorable to substance use—again, not just limited to marijuana. Community law-enforcement permissiveness of substance use: so, right related to the idea of enforcement and whether rules and policies are enforced. And again, if we're thinking about use here—if youth use is not legal, then making sure that law enforcement is enforcing laws is important.

And then, finally, the availability of marijuana, which again we talked about as a risk factor in the poll: what's interesting is that, in one of these studies, they found that this was especially relevant for urban areas. So, in urban areas, the perception that availability of marijuana was relatively easy led to an increase in use faster than in non-urban areas. So, that's just something for those of you who are working in urban areas to know and to be thinking about in terms of how you may think about prioritizing some of these risk and protective factors.

So, then, we move to the next slide, which focuses on protective factors. So, we just talked a lot about risk factors—and those are incredibly important. And just a note here that the opposite of every risk factor is not necessarily a protective factor, but that we do need to be thinking about what are those good things that we can be enforcing for young people—kind of enforcing in a positive way—so, perceptions that are positive perceptions that it is harmful to use.

So, some of those protective factors: again, the intention not to use marijuana is really strong and really important. Going back to that family history of use and low parental monitoring, here it is true that parental monitoring and youth perception of that monitoring is incredibly important. And, actually, one of the research articles here found that was especially true among females and high risk takers. So, working on that parental monitoring piece is incredibly important. Having fewer friends who use marijuana is a protective factor. Having parents and peers who disapprove of marijuana use is, again, incredibly important in terms of protective factors related to this.

Interestingly here, one of the studies found that the role of fathers in that parental piece is incredibly important. Then the second column: perception that friends do what is right—again, those young people and the friends that they surround themselves with—being incredibly important. Neighborhood cohesion: you know, that feeling of

belonging being really important, feeling like young people are valued, that sort of sense was a protective factor.

And then there is a bit about traditional religious beliefs and practices. I'll just note for this one that it was actually a relatively small study among African American females. And in this case, it's laying the groundwork for those religious beliefs and practices while they're young—or younger—so, in that 12-17 range that we're talking about today, that that is incredibly important in terms of that protective factor.

So, then that wraps up the really speedy overview of these risk and protective factors. And I think I would like to now hand it over to Lourdes.

[Lourdes Vázquez]: Thank you, Gisela. And even though you think it was speedy, I think the depth with which you covered the content was precise and on target. So, because it was kind of speedy, the presentation has been going over—it's an overview of the risk and protective factors. For more information—if you want more information, detailed information about all of this that Gisela just discussed with us—you might want to use this decision-support tool developed by the Center for the Application of Prevention Technologies. It's the risk and protective factors associated with youth marijuana use. And you can access it following the link that we provided a few minutes ago in the chat.

And we will also provide that information via e-mail after the webinar and more information almost at the end of the webinar per se. So, thank you, Gisela.

And I think we are now ready to revisit what you provided as responses in the poll a few minutes ago, when you discussed which factors are influencing youth marijuana use in your community. And at that point, you all mentioned that positive attitudes towards marijuana use seems to be one of the major factors influencing in your community, followed by having friends who use marijuana—and you heard Gisela discuss some details about it—followed by those community norms favorable to substance abuse. So, they're very closely related. You were on target, all of you that shared with us your responses to the discussion that we just had a few minutes ago, when we mentioned various factors that you see in front of you at this point. So, thank you so much for that fantastic discussion.

So, now we go back to our fabulous road map that guides the conversation today. As you may have noticed, we have completed the discussion about the risk and protective factors, and now we're going into the interventions. And I wanted to kind of step back a little bit here and remind everybody that because youth marijuana use is such a

complex issue and in a complex context that we described a moment ago, practitioners, we want to make sure that we select the interventions with positive effects on directly reducing marijuana use, like, for example, delaying the age when youth start using, or reducing the risk factors that you determine are your priority in your community, or even increasing the protective factors that you have assessed in your community.

So, that's very important, and I want to kind of remind you that this is a complex issue in a complex context, and we have to be very intentional in our decisions.

So, going back to a poll—and it seems like we like having you participate in the discussion today. We would like to introduce another poll having your response to the following question: which programs or strategies are you implementing to target perceptions of harm and/or social norms related to marijuana use?

Let's see … Gisela, would you like to process?

[Gisela Rots]: Sure. Thanks, Lourdes, and thanks for helping us get to this point.

I see a lot of great answers coming in. So, again, targeting the perceptions of harm or the social norms related to youth marijuana use. I'm seeing a lot of efforts engaging the communication sector—so, thinking about social norming campaigns, or communication campaigns. Also some components around engaging parents effectively, so looking at how we can engage parents in prevention strategies. Looking at other peer-related options, mentoring opportunities.

These answers are coming in so fast. This is great.

But peer—or peer-to-peer kind of mentoring opportunities. Engaging folks in programs such as Project SUCCESS, which we will talk about today. Other peer-to-peer groups, motivational interviewing.

So, we're really seeing that folks are thinking about a broad selection of strategies, from specific peer-mentoring kinds of strategies, to parental-education strategies. Curriculum in the schools—so that we also have something going on in that school domain. And also, wider communication-based strategies, engaging a large number of community stakeholders, including recovery groups, including some activities in the community that are relevant—neighborhood kind of centers.

And so, I think what we're seeing here is that a lot of you were thinking about

strategies across the continuum of the socio-ecological framework, which I think is perfect and a great way to set up our discussion around those strategies relevant to preventing youth marijuana use, specifically when we think about the perception-of-harm kinds of risk and protective factors.

So, with that, thank you all for your answers. That was really, really helpful. And it's great to see such a wide variety reported. And I think you've just made Lourdes' presentation in the next section just a little bit easier. So, Lourdes, can I hand it back over to you?

[Lourdes Vázquez]: Sure. And thank you, Gisela.

And I was going to say the same thing. You have already done the work for me. So, thank you all for your responses.

So now, thinking about how we select the strategies and which strategies we should select: so, one of the first things that we invite you to do is that when selecting strategies, you might want to consider selecting a combination of them, in order to increase the probability of achieving those outcomes that you are pursuing.

However, for example, it's not so much about the number of strategies implemented. It's about selecting the strategies that have demonstrated outcomes. And you will hear me repeat that on and on as we move forward.

One of the things I wanted to mention, also, is that most of the research done on strategies has been done at the individual level, but there are some strategies with strong evaluation support in the broader domain, such as schools and communities. And you mentioned some of them in the poll that we just shared—or you shared with us—a few moments ago.

So, for example, if you are in a community selecting perception of risk as your priority risk factor, you may want to do one intervention—or select an intervention—that really addresses that selective risk factor, but not only that addresses the risk factor but shows outcomes related to risk factors. You may want to implement a strategy with youth in your community or youth that are a higher risk and would provide an example of such a strategy.

You may want to introduce a second strategy for youth and parents, or parents by themselves, for parental training: monitoring to improve family management and communication. And you may also want to introduce a third strategy for school or

community.

But as we mentioned, it's not about the number of strategies. It's about the connection between the strategy and the actual risk factors being addressed and with the issue, in this case: youth marijuana use.

So, how about, then, which evidence-based programs and strategies are out there that we should be considering as prevention practitioners?

So, this is where I mentioned at the beginning of the webinar that we would be unpacking the discussion. And by unpacking we mean that, instead of providing a list of the strategies, it's very important to see, first, which are the outcomes the strategies have, and how they align with the outcomes that I'm pursuing at a community level. And secondly, which are the key elements of those strategies that will lead me to the outcomes I'm pursuing?

So, the two key elements identified in drug education and curriculum programs with outcomes—positive outcomes related to increasing perception of harm—are, first of all—they focus on increasing knowledge about the consequences related to marijuana use. And secondly—but not less important—they help youth develop the skills necessary to refuse the peer pressure or offers even from adults to use marijuana.

And you will have all this information that I am discussing in one of the handouts that you will have available—access to—at the end of the webinar, also.

So, how about the outcomes?

So, we mentioned the key elements. What are the outcomes of some of those programs that have—again, sorry for the redundancy—positive outcomes related to increasing perception of harm? First, youth see a greater risk associated with regular use. So the perception of risk is increased. Secondly, a large number of program participants disapprove marijuana use immediately after the program ends—and not only immediately after, but also six months after follow-up—six-month follow-up.

And participant youth realize that not that many of their peers use marijuana. So, that perception that "all my friends use marijuana" is reduced is one of the outcomes with this curricula and also programs because some of these programs also include second components working with parents, and that's what we call multipart drug education and curriculum program.

There are also outcomes for parents in these programs that have demonstrated evidence of effectiveness. In this case, parents have more conversations with their children about how to resist pressure from their friends to use marijuana. To increase communication, parents see their children as being capable of having the capacity and the ability—they develop the skills to resist the pressure to use marijuana, and they also have changed perceptions.

So in the past, they may have expected, "My son/my daughter is going to be using marijuana."

They change those expectations: that it doesn't necessarily need to happen, that's not necessarily the reality.

So, let's say you have decided to focus not on perception of risk but on reducing favorable attitudes about marijuana use. Programs with positive outcomes related to the risk factors emphasize two key points here: relationship building—and Gisela expanded the discussion on the importance of that sense of belonging—and also, not only belonging to your peers, and parents, and significant others, but also bonding to the school as a protective factor.

The outcomes evidenced by these programs include reduction in marijuana use in the past month, at one year and two years follow-up. So, the effects are maintained through time. The other one is that fewer students—the intention to use is reduced. And they are less likely to believe in the positive consequences. So they don't see so much value or expectation about marijuana use.

Again, this information you will find in the handout available to you at the end.

So, let's think about media. We talked about education programs. How about media? If mass media to change school norms and community norms favorable to marijuana use is part of what you are considering doing in your prevention practice, it should be very carefully targeted, not used in isolation. And you may recall the combination of strategies that we propose. And it should have a very solid theoretical foundation based on research.

For example, if you are targeting 12- to 17-year-olds, you should not consider a media strategy that is focused on 18- to 25-year-olds, for example. So, it has to also target adolescent need for autonomy, for example, and independence. That would be one of the things that you would like it to do. You're thinking about the 12- to 17-year-olds. And it also has to match the developmental stage you are addressing, like the

example I just gave.

Outcomes: in terms of the outcomes, we have highlighted here two of the strategies that have been implemented in the past, and I will start with the second one, Be Under Your Own Influence. Both of them were implemented for a long period of time, but Be Under Your Own Influence was developed over five years of research—a sound research foundation—showing very strong local effects. And it was unique in its focus of creating that incongruence in youth of, "OK, if I use drugs, I won't be able—this will interfere with me achieving my future goals and autonomy."

That was a major focus and success this strategy had. But the influence came after the Be Under Your Own Influence. And both of them demonstrated either fewer marijuana users—intervention schools were reduced for their use—and then reduced upward trends among especially the sensation seekers.

So, that being said, I wanted to provide you an example of how we can implement a combination of strategies. And perception of harm—this is the risk factor this example provides—this is the one we're targeting. And, you see, the combination of strategies working together.

First, on top—not more important than the others, but I am starting with that one—you may decide to do a districtwide social marketing campaign, making sure you take into consideration the things that I mentioned before. You know, it has to be targeted, and ensuring that it's in alignment with the developmental stage of your target audience. It could be anti-marijuana advertising; it could be an in-school social marketing campaign.

And then you combine it with one of the examples, Project SUCCESS, which mostly targets youth at higher risk through schoolwide activities and also has a very strong parent component, and has demonstrated reductions in marijuana use, especially with the population at higher risk. And Keep a Clear Mind, even though it's not a program— it's an education program, but it's not targeting the 12- to 17-year-olds. It's for a younger population; I wanted to include it here as an example of a program that also is a multicomponent program—take-home program focused on developing or increasing refusal skills.

In a nutshell, we have tried to provide you with some examples of the important points that you should take into consideration when selecting strategies, and how a combination of strategies will increase your probability of achieving the outcomes you have expected for your planning process.

So, now that we have done so, I would like to invite Gisela to continue the conversation about other strategies as well. Gisela?

[Gisela Rots]: OK, thanks, Lourdes.

And before you go too far—just as you were speaking, a couple of questions came up, and I just wonder whether we want to quickly address them, just looking at their relevancy to what you were just talking about.

So, we had somebody ask about how were we able to measure the outcomes that Lourdes listed, I think, especially for the parent-related strategies.

And Lourdes, if I'm not mistaken there, it's really about doing a combination of both parent surveys—if you're doing a program aimed at parents—as well as including questions on student health surveys.

Would you say that that's about adequate? Is that how you would respond to that question, as well?

[Lourdes Vázquez]: Yes. And, thank you for responding to that question. Precisely, Gisela. In addition to any specific pre- and posttests that a specific program—educational program in particular, has—but it's really about the bigger picture that can be captured through a school survey or a statewide survey.

[Gisela Rots]: Great. Thanks for that. And, hopefully, that answers that question. We also had a question about work to overcome the youth perception they get from adults that marijuana is only a plant and alcohol is worse.

And I think that is outside the scope of today's conversation. I can highlight the fact that—and I think this is related to the scare tactics and scare-based approaches in some ways.

In the Northeast region—actually Maine, the State of Maine—has done a lot of work—and I know there are a couple folks from Maine on the webinar today. They have done some work on really making sure that their communities have access to research about what constitutes marijuana—what some of the real dangers are. They made sure that all of their messages were very much grounded in the research, and that seems to have an impact.

So, I would encourage you, if you're looking for some samples there, maybe Google some of the Maine work. I think related to that, the idea of scare tactics and fear-based approaches: in recent times, we've really steered away from using scare tactics because they were not found to be helpful. And we here at the CAPT have been doing some work looking into the relevance of scare tactics or fear-based approaches. And what we've kind of come out with is that there are a lot of differing opinions on whether they're effective or not.

However, what we can say is that, if we're thinking about implementing a social marketing campaign, or some other communication-based campaign, it is incredibly important that we think about doing that with fidelity to the process. So, that means we need to take into consideration the type of message we're creating, the audience, their characteristics, and their attitudes that we want to change—or need to change—or maybe, like with `Above the Influence`, we need to encourage their current characteristics and their behaviors. We need to look at that recommended behavior, potential behavior change, and ethical considerations related to developing messages that are based on fear.

What the research is very clear on, however, is that if you are going to use fear-based tactics, it's incredibly important to make your message fact-based, right? So, making it real, making sure that there is a logical conclusion that folks are able to draw based on your message, and ensuring that you've tested the message with the audience and that it's relevant to your particular audience. So, just a generic example: some kind of social marketing campaign on drunk driving for an urban audience that doesn't drive isn't really going to change behavior. So, making sure, again, you're encouraging folks to look at the logical conclusion that folks would take.

If you think about campaigns such as the `Truth` campaign: those have been very effective because they've been very real, and they've been very strategic in pointing out the things that are relevant to the audience that they are gearing their message towards. So, messages should be straightforward, and they should not contribute to feelings of denial, powerlessness, or being manipulated by the folks who are developing the message.

And that's just a little caveat. We wanted to talk a little bit about the importance of thinking about social marketing campaigns and perhaps the relevance of potential fear-based approaches.

So, then again, as we highlighted earlier in your material that you received this morning, you received a couple of materials that are related to the strategies and

interventions to prevent youth marijuana use. There's a document that links the risk and protective factors to the strategy. There's a document that actually walks through the different strategies, and what their components are, and what the outcome is that they found in those strategies.

Again, it's all based on the literature and the research. And we encourage you to look at those for more in-depth information. There is also a document that highlights specifically the strategies that Lourdes just talked about that are related to the perception of harm.

So, here's the big question, right? So, this is a big issue—youth perception of harm—lots of risk and protective factors that we talked about. Yet, when it came down to strategy, there wasn't a lot that we could present in terms of what's in the research.

So, what do we do when we are faced with this case where we need to address a certain risk or protective factor, or group of risk and protective factors, and we can't quite find a strategy that is relevant?

Well, there are some things that we do know work, right? So when there is a lack of evidence in terms of evidence-based strategies, we need to be thinking about what lessons have we learned from other substance-use issues. For example, underage drinking: are there types of strategies that worked for underage drinking where we could draw a connection to what we're doing in preventing youth marijuana use, and that might be effective there? We want to make sure that, in this case, we are specifically focusing on what we know was effective for preventing underage drinking or reducing underage drinking.

And we don't want to be going for strategies that, well, some of those linkages might have been a little tenuous. You really want to make sure you're looking at strategies that were found to be effective. We want to be thinking about the theories, the research theories out there that can help inform our prevention planning—the theory of change that we might be following, making sure that we are able to follow those logical conclusions, and then, again, lessons learned from the implementation of new prevention practices for other substances: what worked, what didn't work.

Are there commonalities that we can identify, and how do those maybe work together? What are some of the challenges that we are facing with youth marijuana use we think we've seen before? And how do we kind of put those together and think about the results that we could be—and the strategies that we could be selecting, based on that.

Not a lot of very tangible pieces, but I think that once we think about those other strategies and those potentially new practices that we can be thinking about we need to think—again, thinking back to the socio-ecological framework and across those socio-ecological levels—we want to consider what we've learned in preventing tobacco use and underage drinking to reduce access, to change those community norms.

You know, one of the things we did in preventing underage alcohol use was really looking at alcohol ads, and where they could appear, and are there lessons that we could learn from that for preventing youth marijuana use? We want to consider how those lessons learned might be specifically applicable to youth marijuana use and be able to draw the logical conclusions. Think about how we address the related perception of harm factors with those substances, right?

So, if we were dealing with youth perceiving low parental monitoring when it came to underage drinking, what did we do in order to help address that? And how did we engage parents to make sure that their youth perceptions were changing? Because, in the end, it's not just about how the parents are communicating: it's whether or not the youth are hearing those particular messages. We do work in public health, and we have to take the long game when we're thinking about preventing youth marijuana use. And when it comes right down to it, thinking about that parental engagement, thinking about youth-oriented education, thinking about how we engage law enforcement and how we engage them well, how we engage the schools and the communities at large to help us think about how we can address this issue more soundly. And I should say that I'm making it sound as though that's easy, and I understand it's not—just to be clear on that one.

So, as we are starting to come towards the end of today's webinar, thinking about how we can use the information we discussed today to build on the approaches we're already using to prevent youth marijuana use. And I encourage you to think about that very specifically. We don't have a specific poll for this, but if you have thoughts, feel free to stick them in the Q&A, and we'll see them pop up, and we can certainly talk about them a little bit more.

And with that, I think I want to hand it over to Lourdes, because I think we might have had some questions come up.

[Lourdes Vázquez]: Yes, Gisela. Thank you so much.

I think we have a question; I think it's from Jaime, who asked if you could give an

example of fear-based communication, if that is possible, Gisela. And since you discussed the section, I think it would be good for you.

[Gisela Rots]: All right. Thanks, Lourdes.

Sure. I can give an example. So, a fear-based message might be something like a PSA on the effects of fetal alcohol syndrome and developing warning labels for tobacco products with a message, "Smoking causes lung cancer."

I'll give you an idea of a scare tactic to kind of give you a sense of how that might be different. So, a scare tactic might be something more along the lines of showing gruesome pictures of victims of drunk driving accidents, and developing warning labels for tobacco products with images of mouth cancer, right?

So, in the one case, it's—in the scare-tactic case—it's really kind of that gruesome imagery idea, whereas with fear-based, it's kind of a little bit more well-developed, a little bit more focused on making very succinct, clear, logical conclusions based on what we're saying, right?

Smoking does cause cancer: lung cancer. That's a known fact. We're just sticking to those facts and not getting the emotions too caught up in that, is what I would say. I hope that answers that question.

[Lourdes Vázquez]: Thank you, Gisela. And we would like to mention and refer you to the National Institute on Drug Abuse, NIDA, to some brain science research. And we can send you the link to key information pieces to all of you who mentioned that you're concerned about the risk factors associated with the impact youth marijuana use has on the brain. NIDA has deep, deep information related to the most recent research on the topic.

There's another question, Gisela, which I may want to address: somebody is asking us about specific strategies to use.

And because of the short time that we have for discussion today, I could only go into the identification of key elements that you should consider and also the outcomes of some strategies. And the selection of the strategies that you will do will be dependent on those risk factors that you deem most important in your community. We invite you to do a deep review of the decision-support tools that we mentioned throughout the webinar today and to which you will have access. After this discussion, I will let you know the links to those resources.

OK. Anything else, Gisela, which I may have missed?

[Gisela Rots]: No, I think that—well, there's one more question—sorry—that just popped up, asking about how do we convince them of the dangers since no one's overdosed, and it can cure cancer, and they don't consider it harmful?

So, that's where, again, I would really encourage you to take a look at some of the links that we'll post from NIDA. And I think that it might be helpful to take a look at those, as well as to look at the example of the State of Maine and the materials that they put together. It's a start down the road.

I mean, neither Lourdes nor I are experts in the dangers. But I think what we do know is that things are changing and the drugs are changing. And we really have to kind of think about the science and how that relates to that. So, I think that, yes, it's a very complicated issue. And I think, Lourdes, you and I both acknowledge that.

[Lourdes Vázquez]: Yes.

[Gisela Rots]: And with that, I'll hand it back over to you.

[Lourdes Vázquez]: OK. And thank you, Gisela.

So, I would like to go through the available resources, the CAPT decision-support tools that we mentioned a few minutes ago. There's one on the risk factors associated with marijuana use. We mentioned, also, the one on strategies and the description of the specific programs that address marijuana use for that person that requested some more information about the strategies. These are available following that link.

There is also one resource on an annotated bibliography for those of you who like to go to the actual articles that describe the research foundation of each one of them and beta sources for many of you who are still doing needs assessment or understanding the issue within your communities—this could be a good tool.

In addition to the decision-support tools, we also have one handout titled *Applying SAMHSA's Strategic Prevention Framework, (Steps 1-3) to the Prevention of Youth Marijuana Use.* And you'll have that available, as well.

So, there's another way of accessing these tools. And first of all, I want to mention that after the webinar, you will receive an e-mail with an invitation to check back to CAPT

Connect, to the same page you went to register to find these resources. And you will also find there your certificate of participation.

So, in addition to the CAPT Connect e-mail—e-mail with a link—you can also access these tools. They are available in the CAPT area of the SAMHSA website. You have here the address. And look under "Grantee Stories, Tools, and Other Resources," and all those resources are there and many others, as well, on other topics.

So, very important, if you are listening only today, please e-mail us at CAPTevents@edc.org so we can track your attendance today. Again, if you are listening only today, please e-mail us at CAPTevents@edc.org and we can track your attendance.

So, almost ending the webinar: we want to remind you that this week is National Prevention Week. The theme is "Strong As One, Stronger Together."

Thank you for your participation in this webinar today. We would also love to have you participate in tomorrow's events: a suicide prevention Twitter chat with SAMHSA and Torrey DeVitto, the star of NBC's medical drama Chicago Med and this year's National Prevention Week ambassador. So, that's going to take place tomorrow from 1-2 p.m., and that's important for you to keep in mind for tomorrow.

If you have any questions or comments, please don't hesitate to contact Molly Lowe. She has been on the back end, responding to some of your questions. And, very important for all of us is to receive your feedback. It's very important to us. Please click on this link below to provide feedback on this event. We will really appreciate hearing your comments to see how we can improve future events.

Thank you so much. Gisela, do you want to say some last words?

[Gisela Rots]: Thanks, Lourdes. Well, thank you for cofacilitating today. I really appreciate it.

We did get a couple questions about certificates of attendance today, and those will be posted. As long as you join through your CAPT Connect link, those will be posted in your CAPT Connect account in the next couple of days. So, definitely look at those.

And some folks were asking for contact information. Again, you can e-mail Molly Lowe. She knows how to get in touch with us.

[Lourdes Vázquez]: Thank you!

END OF RECORDING   +++