

My name is Jess Chaiken and I'm here to talk about Evidence Based Practice. My goal here today is to give you a general overview of EBP and direct you onward to learn more. I am a librarian. I'm not an evidence-based practitioner, per se. I'm not a clinician or social worker or a human service provider. I work with a community of researchers and practitioners who do put EBP into practice every day. I want to introduce you to EBP and the wide world of resources out there where you can really get into the topic and learn more.

A bit about me, my library, and the community we work with.

What do we mean when we talk about evidence-based practice? The first definition here comes from the medical community, where EBP emerged, where a physician or nurse uses it to determine the best treatment for their patient. Now EBP is applied across health and human service fields: social work, education, medical rehabilitation, independent living, voc rehab, transition (school to work or homelessness to stable housing), rehabilitation and recidivism for justice-involved people.

The third definition up here is how I think of EBP.

I found the 5 As when exploring this topic and it's a good distillation of how to use EBP: Ask what the best programs are for your clients, knowing their circumstances and resources. Acquire a set of research, looking for the evidence about the programs you are looking into, or the population you are working with. Appraise the evidence for quality and relevance to your situation and select the most appropriate program for your clients. Apply the program according to the research. Assess how it's working and whether to continue, tweak, or find new programs.

So I like to hang these talks on a plausible situation so you can see how it might apply to your organization. Let's say you have a new director (apparently in 1992 based on the shoulderpads in this photo) and she is getting to know your employment program. She asks why the organization uses this particular program. Does it work? Are there more effective programs that could improve employment outcomes for your clients. Basically, she wants to know why you are doing what you are doing?

So your director has asked, why are we running the program we are running? Can you answer on the left or on the right? Is it because this is what you were trained in? This is the program that was running when you started? It's what you know? If you want to answer on the right, you should look at EBP

The first of the 5 As, ask, means you formulate well-defined, answerable questions that can be used to find the research you need..

This step determines what evidence to look for and where to search for the best evidence using two types of questions, which are questions about a general setting or questions about context and a specific case within that context. Examples: Who are my clients and what are their needs? · Would this intervention be effective for my consumer, knowing their needs and circumstances? · Does the evidence supporting this intervention apply to my consumer? · Should my consumer receive this intervention? When? For how long?

Based on these questions, you may get a better idea of where to look. Maybe the ERIC database or the National Clearinghouse on Rehab Training Materials? Perhaps a database of social work or psychiatric interventions. At the end I have a list of sources for EBP which can help you target your search

Once you have your questions in mind, you can start searching through the literature. Start with some keywords related to your client or situation and combine with terms like “systematic review” or “meta analysis.” You can also search for terms like intervention, program, treatment. Make a note of any similar terms that come up in your search: You might start out with “mental health” and, over time, collect a batch of related key terms (psychiatric disabilities, serious mental illness, depression, or other specific conditions).

You may need access to an academic library or other subscription service – some articles will be available free of charge, others will require a subscription.

Can you Google it? Yes, sure. But you will spend less time getting to the best information if you start from a trusted, well-organized source like Cochrane or AHRQ.

Here’s a sample search from our REHABDATA database. I searched for the words psychiatric and employment along with the phrase systematic review and came up with three abstracts. These can be ordered from our service.

You absolutely can use Google, maybe to get a look at the universe of your topic but keep in mind that you may be overwhelmed with results, you may not be able to judge the quality of the resource and its accuracy, and you may not be able to tell whether a source is subject to peer review or other measures of quality and accuracy.

Here’s another example of a great source for evidence of interventions and treatments. The Cochrane Library is extensive. The reviews are very high quality and they include plain-language summaries of the findings. Here’s a sample of their reviews under public health for increasing physical activity in specific environments or with specific populations. They include both research reviews (systematic reviews) and reviews of reviews – In other words, the review groups may actually study a collection of systematic reviews on a topic and report an overview of interventions in the field.

Each article has very specific information about their criteria to include an intervention article or a systematic review so you can clearly see whether the study applies to your situation.

Some of the cochrane articles are available free of charge.

Once you have your articles, it’s time to read through and determine whether the evidence is of high enough quality and whether it matches your situation. How close does it match? Same or similar populations? Environments? How old is the research? Do you know if newer programs have been developed?

Next look at the evidence and how strong it is. Did you find several articles about this intervention, a few, one or two? What kinds of studies were they? Randomized controlled trials are considered “gold

standard.” the effects are tested compared to a controlled group that may receive standard treatment or no treatment. Other types of studies still have value, however. There is a scale which can help you decide how strong the evidence is.

When you think of “strong evidence” you may think of some of these phrases.

You can assign levels to evidence. These come from the RRTC on EBP in VR. This five-level hierarchical framework offers a way for practitioners to evaluate the strength of evidence for use in VR service delivery. Each level builds on the level below it, with Level 5 representing the weakest evidence available, and Level 1 representing the strongest evidence available.

Level 1 is the strongest. A group of experts have gone through the existing research for you, identified the strengths and weaknesses, and come to a conclusion. Define systematic review Systematic reviews answer a specific clinical question by inviting scholars with expertise in the substantive area to conduct the review using predetermined rules for capturing the evidence, appraising the available evidence, and synthesizing the results in a manner that is easily accessible to clinicians. RCTs: RCT's possess three characteristics: An experimental group who receives the experimental intervention or treatment A Control, or Comparison group who receives standard care or a comparison intervention that is different from the experimental treatment Random Assignment, or Randomization to experimental and control or comparison groups

Level 2 may involve evidence from just one or two studies. You might find the individual articles yourself or find a review of one or two interventions.

Level 3 the evidence may still be good, but it is not as strong – there was no RTC so you may not know how results compare to other treatments or no treatment, but they may have done pre and post testing to see if the intervention had an impact. They may have looked at a specific group over time or at case controlled studies (A study that compares patients who have a disease or outcome of interest (cases) with patients who do not have the disease or outcome (controls), and looks back retrospectively to compare how frequently the exposure to a risk factor is present in each group to determine the relationship between the risk factor and the disease.)

Level 4 can include observational studies, descriptive studies, case studies, or correlational studies.

Level 5 relies on expert opinion. Weak doesn't mean bad, per se. But it doesn't have the weight of, for example, a systematic review of multiple RCTs. You're asking the experts for their opinion based on experience, clinical evidence, etc.

There are other scales that take the levels to 6 or 7 and include systematic reviews of descriptive or qualitative studies, a single descriptive or qualitative study, and case reports.

I like this one – 5 is easy to digest.

What about new interventions that haven't been around long enough to be tested? They may also be relevant to your organization, so by all means take a longer look. Promising practices can be considered stronger than emerging practices.

Once the evidence has been critically evaluated, you can apply your professional expertise to determine if the intervention meets the needs of your individual consumer. It's recommended that the intervention not only correspond with research findings, but also be tailored to the context in which the intervention will be delivered.

You should absolutely plan to track the results of whatever program you implement. I'm not here to tell you how to do that. The studies may indicate how the researchers tracked results (pre- and post tests, surveys, data analyses). But you should be able to report back to your director whether the program worked or didn't work and show the numbers.

So this gives you a general idea of how to approach evidence-based practice and how to apply it to your work and your organization. Besides the scenario of a new director coming in, where are some other places you could use the EBP approach?

Grant writing – if you are seeking grants for community development or programs, you can use the EBP approach to identify appropriate programs and, in your proposals, cite the research to show funders that the program has the potential for success in your community.

Expanding into new markets or fields – say your organization specializes in one population (i.e. Latino families) or one area (independent living) and you want to explore other areas (i.e. refugee resettlement or health promotion). You can use EBP to familiarize yourself with this new area and identify potential programs.

Budget development – Having the evidence of a successful program may give your program more weight as organizations are developing their budgets.

Policy development – EBP can add support to policy recommendations, such as expanding access to school programs or encouraging business development in underresourced communities

Recruiting staff – having an EBP program in place could attract high-quality paid and volunteer staff. This worked for me as I looked for a volunteer tutoring opportunity. I visited the What Works Clearinghouse and looked for reading programs. I found Reading Partners which had programs in DC and decided to volunteer specifically because it is a successful program with the evidence to back it up.

Outreach to communities – similar to recruiting staff, bringing a new program into the community that has demonstrated positive outcomes may increase buy-in from the community

Advocacy – Similar to policy development, if you want to advocate for programs or services on behalf of your clients, having the research in your pocket to show it works will go a long way to convincing those in charge.

Developing relationships with advocates – EBP includes the integration of the stakeholder’s voice, along with the evidence and your clinical experience, to make the best decision for the consumer.

ERIC – education

Cochrane – various including public health, education, disability, specific conditions

Campbell – education, justice, public health, policy

AHRQ – healthcare

REHABDATA – disability and rehabilitation

I highly recommend visiting Research 2 VR practice. They have an online training program in integrating EBP. It focuses on VR but I found it easy to apply to several areas. And it’s free!