Preventing Prescription Drug Misuse in the Workforce: A Randomized Controlled Trial of the Web-based ***Smart Rx*** Program

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The ISA Group
Center for Workforce Health

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Who We Are

- *ISA Group*

  Behavioral health R&D firm, established in 1978; received over $30 million in NIH support

- *Center for Workforce Health*

  Provides web-based behavioral health programs to workplaces

Smart Rx

A Web-based Program to Prevent the Misuse of Prescription Drugs by Working Women

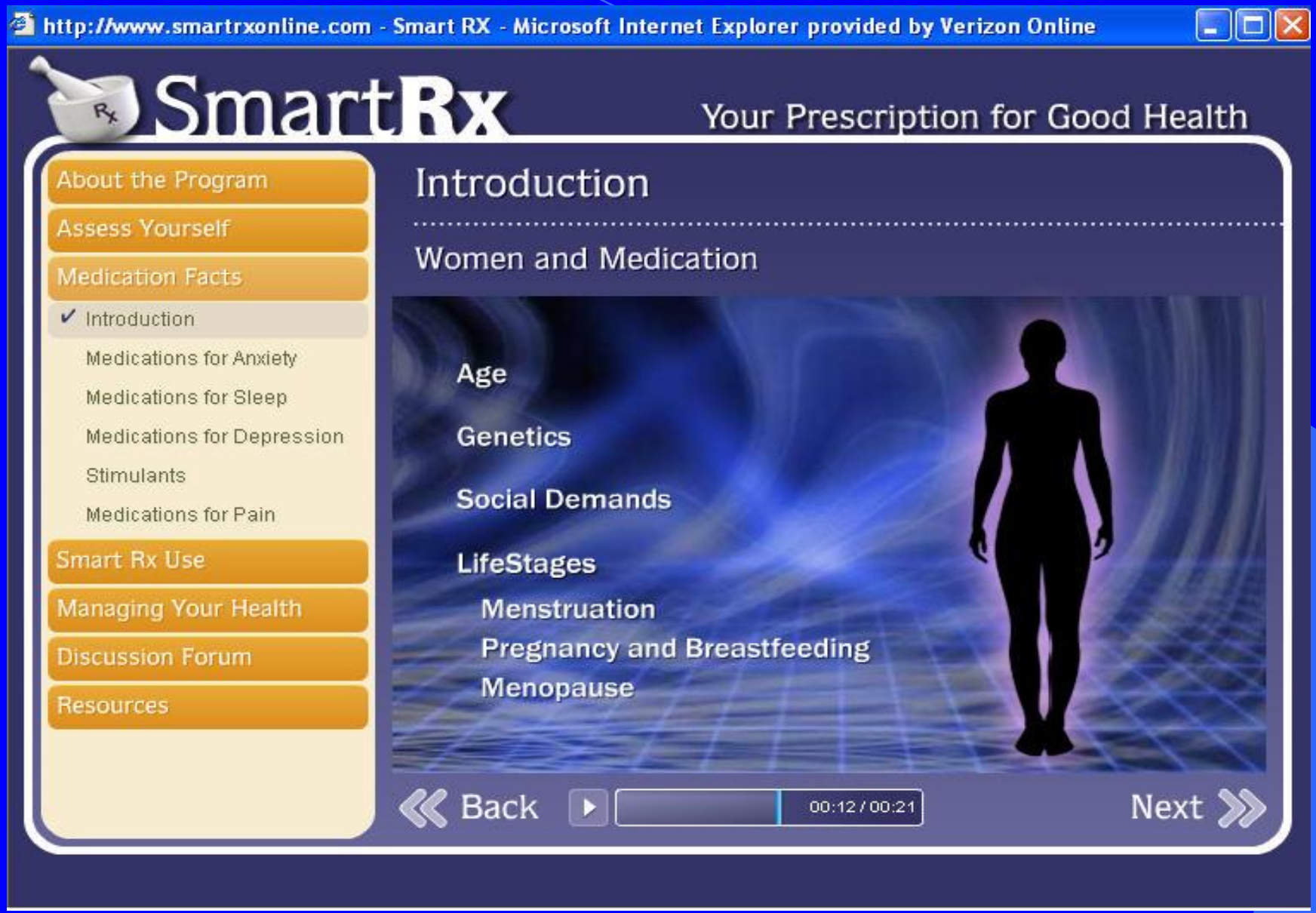
- Based on a social-cognitive model, designed to raise awareness, increase motivation and teach skills for safe prescription drug use
- Targets *women*, who are prescribed psychotropic drugs at twice the rate of men
- A multi-media program, fully audio-narrated, with interactive assessments, animation and graphics

The Program

http://www.smartrxonline.com - Smart RX - Microsoft Internet Explorer provided by Verizon Online
SmartRx
Your Prescription for Good Health
About the Program
Opening
Introduction
Assess Yourself
Medication Facts
Smart Rx Use
Managing Your Health
Discussion Forum
Resources
Introduction
Using this Program
SmartRxOnline
Your Prescription for Good Health!
Back
00:06 / 02:45
Next

Assess Yourself

Medication Facts



Medication Facts

Medication Facts

Medication Facts

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Introduction
Know Your Medication
Know the Risks
Record Keeping
Avoid Medication Problems
Stopping Your Medications
Managing Your Health
Discussion Forum
Resources
Know Your Medication
Assertiveness is Key
Assertive body language includes:
Maintaining direct eye contact.
Maintaining an erect posture.
Speaking clearly and audibly.
Not using a soft, whiny, or muffled voice.
Using facial expressions and gestures to add emphasis to your words.
Back
01:24 / 01:43
More
Next

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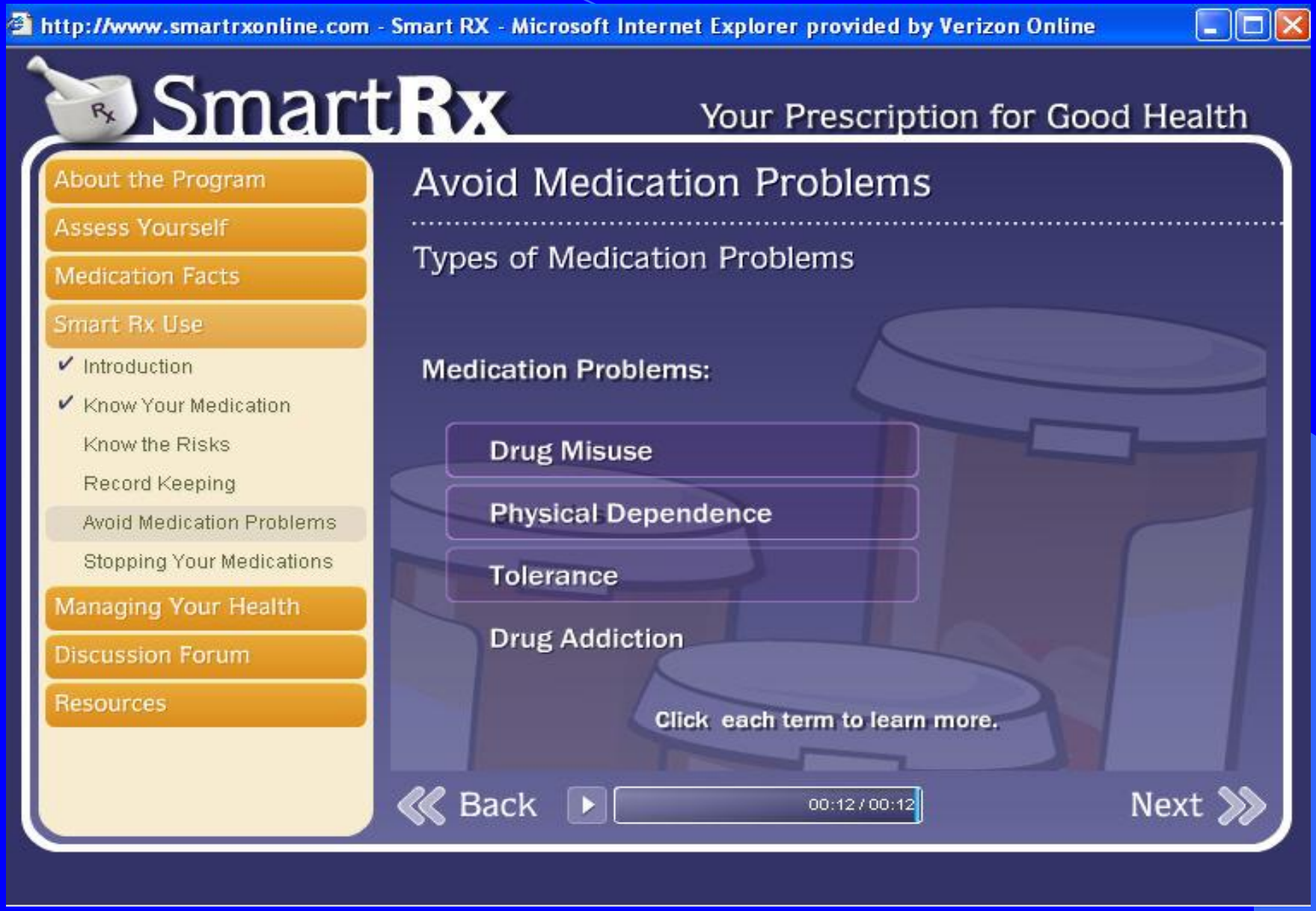
Doctor Visits
Click on the photos to hear women asking for the information they need.
1
2
3
4
5
Back
00:07 / 00:15
Next

SmartRx Use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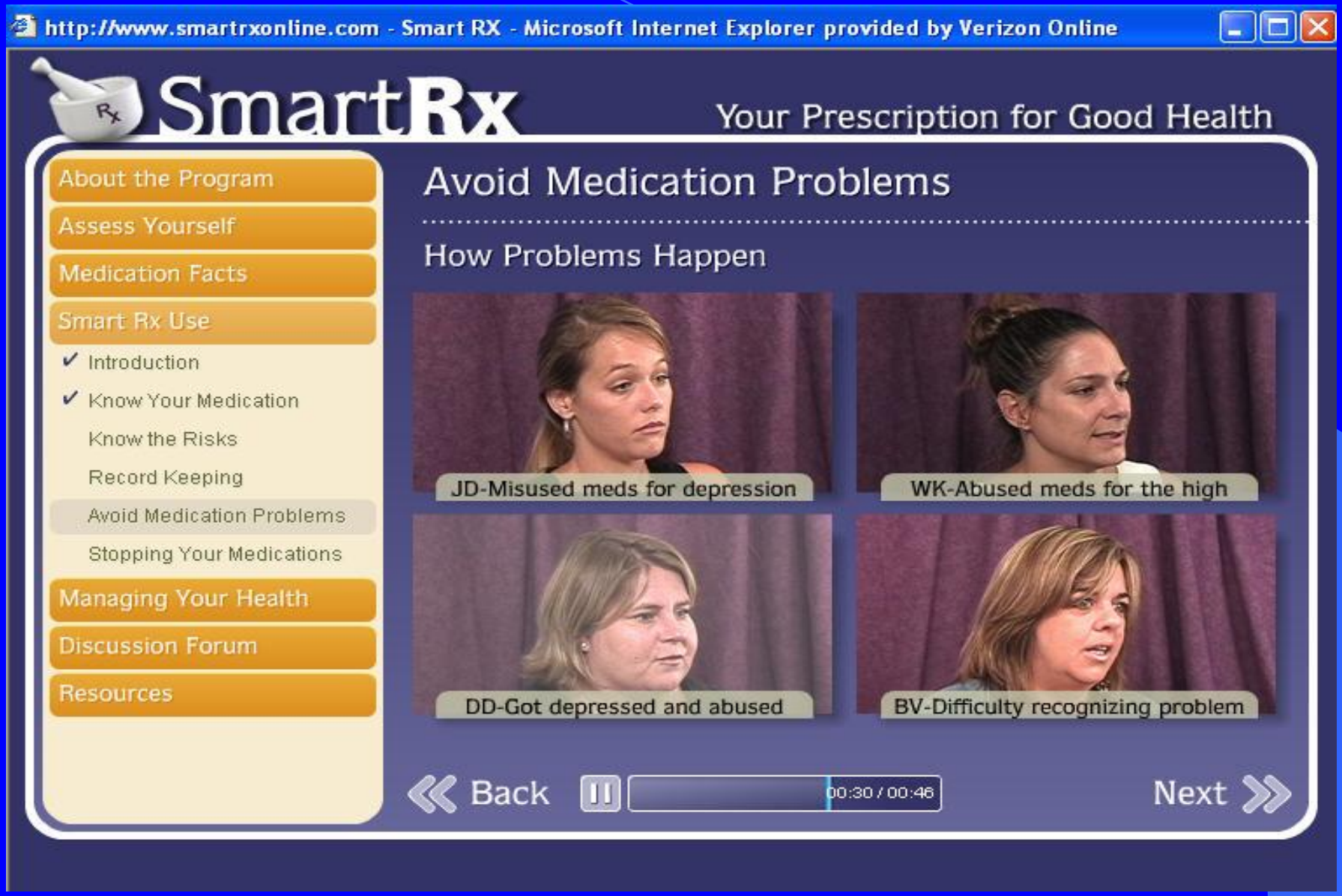
Discussion Forum
Resources
Avoid Medication Problems
Types of Medication Problems
Medication Problems:
Drug Misuse
Physical Dependence
Tolerance
Drug Addiction
Click each term to learn more.
Back
00:12 / 00:12
Next

SmartRx Use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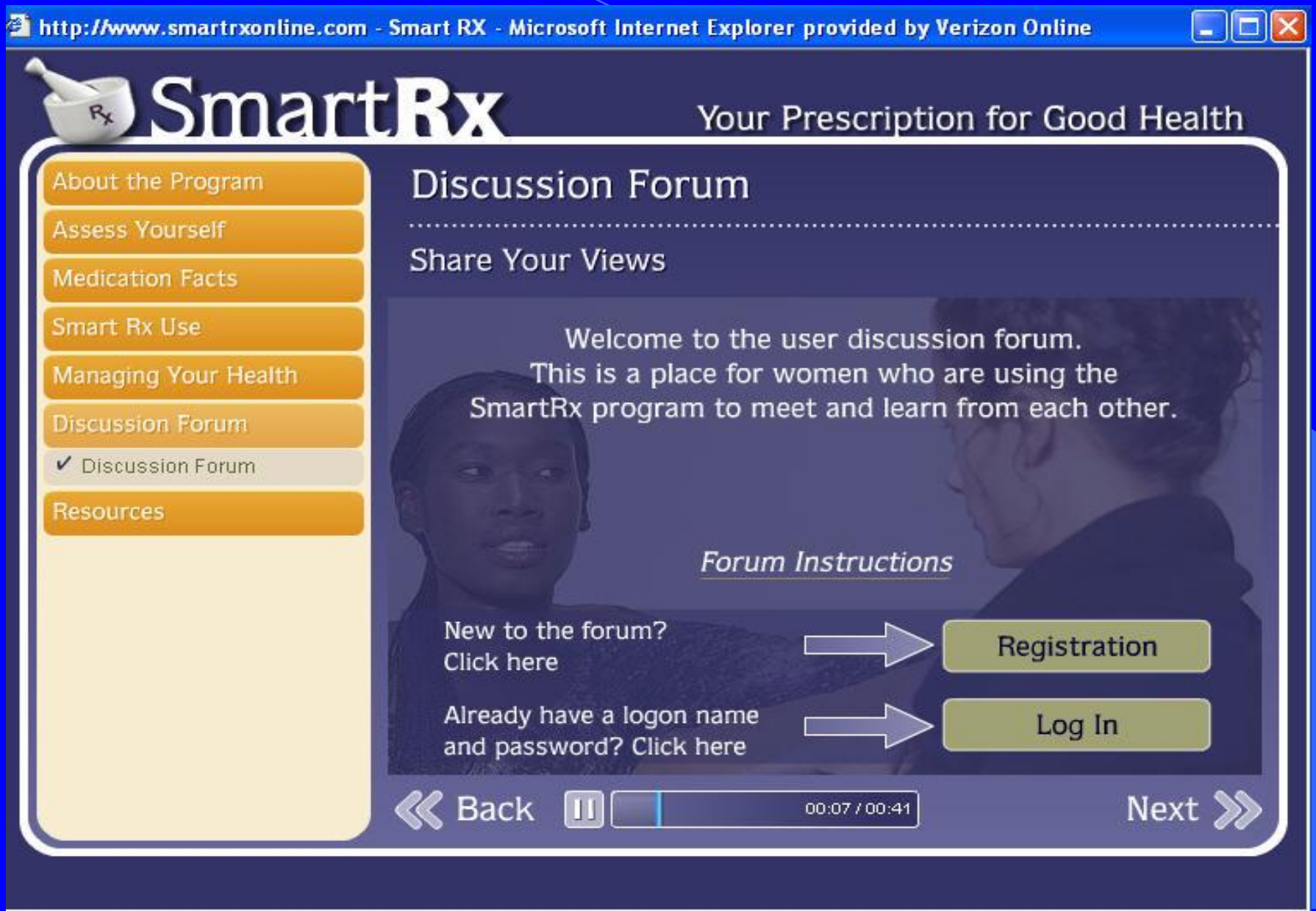
Discussion Forum
Resources
Avoid Medication Problems
How Problems Happen
JD-Misused meds for depression
WK-Abused meds for the high
DD-Got depressed and abused
BV-Difficulty recognizing problem
Back
00:30 / 00:46
Next

Managing Your Health

Managing Your Health

Discussion Forum



Resources

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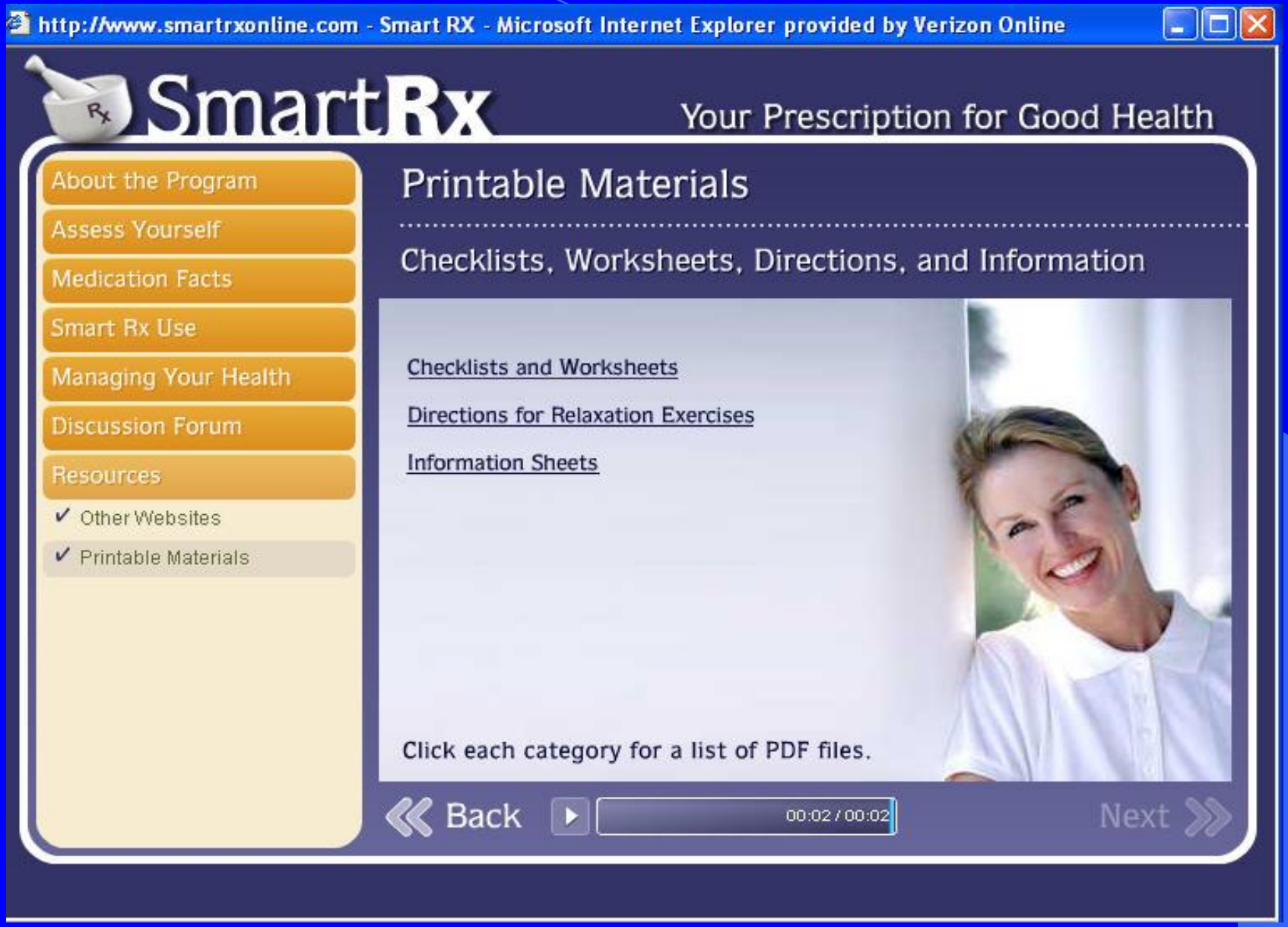
Other Websites
Printable Materials
Other Websites
Websites and Community Resources
Alternative Therapies
Community Resources
General Health and Mental Health
Mood Disorders
Pain Disorders
Pain Medications
Pharmaceuticals
Sleep Disorders
Sleep Medications
Stimulant Medications
Substance Abuse
Using Medicine Wisely
Women's Issues
Click each category for a list of Web sites.
Back
00:38 / 00:38
Next

Resources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Other Websites
Printable Materials
Printable Materials
Checklists, Worksheets, Directions, and Information
Checklists and Worksheets
Directions for Relaxation Exercises
Information Sheets
Click each category for a list of PDF files.
Back
00:02 / 00:02
Next

SmartRx
The Randomized Trial

- 370 employees randomly assigned to Web (SmartRx) or treatment as usual (control)
- Outcome measures: (1) Self-assessments of health practices use and attitudes; and (2) participant ratings
- Health practices included prescription drug use, attitudes toward health care, knowledge, and drug problems (CAGE)

Sample

- Women working in two hospitals in Ohio and West Virginia
- Easy recruitment, low attrition (4%), good compliance
- Majority educated (83%) had some college or above
- Most did not use computers as regular part of their job
- Many were nurses (37%) or other medical technical (23%)

Measures

- National Survey on Drug Use and Health (NSDUH)
- Knowledge of Prescription Drug Abuse and Dependency
- Perceived Efficacy in Patient-Physician Interactions (PEPPI 5-Item Version)
- Treatment Seeking Self-Efficacy and Confidence in Ability to Address Drug Problems
- CAGE for Prescription Drug Use
- Program Utilization
- Reactions to the Program

Analyses

- *ANCOVAs* conducted on outcome indices– measuring pre-post differences to test program effects
- *Logistic regression* analysis conducted on behavioral indices - looking at reports of problematic prescription drug use
- Descriptive data analysis on program utilization

Drug Use Findings

Baseline Medical Use

Medications taken as prescribed

Med	N	%
Anti-Dep	101	28%
Analgesic	82	22%
Anxiolytic	58	16%
Sedative	33	9%
Stimulant	9	3%

Drug Use Findings

Baseline Non-Medical Use

Prescription medications not taken as prescribed

Med	N	%
Analgesic	24	7%
Sedative	18	5%
Stimulant	5	1%
Anxiolytic	4	1%
Anti-dep	1	0.3%

Effects of the Intervention

Experimental vs. Control - Knowledge				
Measure	Exp X (SD)	Control X (SD)	F	p
Drug Facts	13.23 (2.40)	12.84 (2.33)	3.75	.025*
Smart Use	13.1 (1.63)	12.90 (1.43)	0.79	.457
Manage Health	6.48 (0.96)	6.40 (0.89)	2.08	.127

Effects of the Intervention

Experimental vs. Control – Self-Efficacy				
Measure	Exp X (SD)	Control X (SD)	F	p
Doctor Interactions	17.85 (4.33)	17.70 (4.30)	0.38	.687
Medication Adherence	58.82 (11.88)	56.88 (11.72)	4.73	.013*
Manage Problems	28.05 (3.99)	27.43 (3.83)	3.71	.026*

Effects of the Intervention

Experimental vs. Control – CAGE Questions				
Measure	Exp X (SD)	Control X (SD)	F	p
CAGE Score	.485 (0.83)	.861 (1.19)	3.30	.038*

Program Utilization

- 178 women in the experimental condition
- 92% program users were in the SmartRx program over 20 minutes
- The average amount of time spent in the SmartRx program was 113 minutes or 1 hour 53 minutes
- The average number of pages viewed was 63
- The average number of visits per user was 4 login sessions
- Forum utilization was low – users came in looking for information but did not initiate conversation

Program Ratings- % Answering Agree or Strongly Agree

How ***clear*** was the program content?	95%
How ***interesting*** was the information?	84%
How ***informative*** was the information?	83%
How ***useful*** did you find the program content?	86%
How ***easy*** was the program to use?	90%
How ***motivating*** did you find the program content?	67%

Summary & Implications

SmartRx program users:

- Greater knowledge of proper prescription drug use compared to controls
- Greater self-efficacy in their ability to manage and adhere to pharmaceutical treatment indices compared to controls
- Lower reporting of concerns about their pharmaceutical drug use (CAGE) compared to controls
- Were likely to visit the site on more than one occasion and spend a good amount of time viewing the program
- Were likely to view the program as comprehensive, clear, informative, and useful.

Further Question about SmartRx?

***For questions about this project please contact*:**

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Center for Workforce Health
Improving the Health and Productivity of Today's Workforce

The ISA Group