

"Which Pill Do I Take?"

A Medication Management Program

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Columbus, OH
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Learner Outcomes

1. Upon completion of the seminar, participants should be able to successfully identify difficulties that a patient may experience with managing his/her own medication as well as type and amount of assistance required.

Learner Outcomes

2. Participants will be able to develop a care plan with goals addressing the cognitive impairments associated with medication management difficulties and be able to train patients and caregivers on appropriate strategies, techniques and cues required for success in home

Learner Outcomes

3. Participants will be able to identify and recommend which medication management systems would be most beneficial for each patient for home-going, and assess functional progress from the medication management program toward established goals.

Medication Management: Why is it important?

- 22% of community dwelling seniors are responsible for their own medications. (Partners in Care)
- Approximately one-third of these seniors have known cognitive impairments.
- A positive correlation exists between number of medications taken and amount of problems that can occur.

FACTS

- The leading consumers of medications are individuals ages 65+ (Orwig et. al., 1)
- Hospitals, nursing homes and other care facilities have medication mechanisms in place to prevent adverse drug reactions (Reducing Medication Errors)

FACTS

- Studies have shown that seniors are taking on average 7 different prescription medications and 2 over the counter medications concurrently
- The average medication compliance was 70%

FACTS

- Another study concluded that the average number of current medications taken by patients was 9.9 (L.Sorensen et al., 628)
- The number found in the home was 14.7 (L.Sorensen et al., 628)

Risk Factors

(L.Sorensen et al., 628)

- Number of pills taken
- Non-adherence with medications
- Forgetfulness
- Confusion between generic and brand names
- Expired medications present in the home

Risk Factors

(L.Sorensen et al., 628)

- Discontinued medications
- Hoarding of medication
- Storing medications in different locations
 - Studies have shown that patients storing their medications in multiple locations were 4.2 times more likely to have recently experienced a decline in their health

Risk Factors

- Medication Errors constitute the largest fraction of medical adverse affects (Partners in Care)
- 1.5 million preventable adverse drug reactions occur each year (Partners in Care)
 - This costs over \$170 billion each year in unnecessary health care costs

Rationale for Medication Management

- The Association on Aging (AOA) and the Institute of Medicine (IOM) report that there are over 7,000 deaths caused by preventable adverse drug events per year
- 40% of community dwelling older adults have medication-related problems

Vocabulary

- Frequency: how number of repetitions of a periodic process in a unit of time (how often to take meds)
- Dosage: the measured quantity of a therapeutic agent to be taken at one time
- Prescription: a written direction for a therapeutic or corrective agent
- Over-the-counter: without a prescription
- Generic: not protected by

Vocabulary

- Capsule: a shell usually of gelatin for packaging something
- Tablet: a compressed block or molded block of solid material
- Orally: given through, or involving the mouth
- By mouth: taken through the mouth
- Refill: to fill again
- Allergies: exaggerated or pathological immunological reaction to substances

Who Needs Medication Management?

- Assess the need for medication management protocol in a Patient's life
 - Is Patient going home to live independently?
 - Is Patient going to Assisted Living facility with option to self-administer medications?
 - Is Patient going to long-term care?
- Does Patient have the desire to

Assessment

- Assessment of Language-Related Functional Activities (ALFA) "Understanding Medicine Labels" subtest
 - It's Standardized!!
 - Allows SLP to determine Patient's baseline level and document progress after treatment
 - Measures Patient's ability to interpret prescription labels

Assessment

- Claudia Allen Cognitive Performance Test
- "Medbox" Subtest

- This subtest requires Patient to read and interpret prescription labels with four different medications and organize two pill boxes for one week
- Prescription labels vary in difficulty
- Two pill boxes (AM & PM) to increase difficulty of task
- Scores of functioning levels 3, 2 or 1 indicate Patients that are not competent to independently manage any medications
- Scores of functioning levels 5 or 4

Screening Tool

MEDICINE CHART

	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.
7 am to 9 am							7 am to 9 am
11 am to 1 pm							11 am to 1 pm
4 pm to 6 pm							4 pm to 6 pm
8 pm to 10 pm							8 pm to 10 pm

Screening Score Form

Subtest 6. Understanding Medicine Labels

- Score** _____
- Correct Response**
1. Dr. Long _____
 2. 4 _____
 3. 1 pill in each square for 1 day _____
 4. Warfarin _____
 5. 1 _____
 6. 1 pill into 8:00 p.m. square for 1 day _____
 7. Yes (point or say) _____
 8. No (point or say) _____
 9. 3 _____
 10. 3 pills, each in a different square for 1 day _____
- # Correct** _____
- % Correct** _____

Screening Tool

Subtest 6. UNDERSTANDING MEDICINE LABELS

MATERIALS: Medicine chart, pretend pills, rest plates.

DIRECTIONS: "I'M GOING TO ASK YOU SOME QUESTIONS ABOUT MEDICINE LABELS. WE WILL USE THESE PREFEREND PILLS." (Place pile of plastic "pills" near chart.)

SCORING: Give 1 point for each correct answer.

1. "What is the doctor's name?"

ANSWER
Dr. Long

2. "This is a medicine chart with one column for each day. Today is (see the day of the week and point to the correct pill) across indicating 4 items of day. Point to each section while saying: "This is a pill in each square for 1 day." "8:00 p.m. in the 8:00 p.m. square." "4 pm to 6 pm; this is second dinner." (Point to the medicine label.) "How many of these pills should be taken each day?"

4

3. (If the answer to item 2 was incorrect, give the correct answer.)

"Put that many pretend pills into the correct sections of the chart for today."

1 pill in each square for 1 day

(Remove the plastic pills from the chart and put them back in the pile.)

CAUTION: Do not leave patient unattended with pretend pills.

Screening Tool

<p>City Pharmacy • (413) 742-6714 257 North Main Street Jones City, MI, USA 49241-2311</p>	<p>TOM AUSTIN TAKE ONE TABLET FOUR TIMES DAILY TAGAMET 300 MG #28 DR LONG EXP 11/11/99</p>
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Screening Tool

<p>City Pharmacy • (413) 742-6714 257 North Main Street Jones City, MI, USA 49241-2311</p>	<p>JOHN GAULAGHER TAKE ONE TABLET AT 8 PM EACH DAY WARFARIN 2MG #7 DR JACOBSON EXP 5/22/98 RFL LEFT 0</p>
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Screening Tool

Subtest 6. UNDERSTANDING MEDICINE LABELS Continued

ANSWER
Warfarin
1

4. "What is the name of this medicine?"
5. (Point to the medicine label.) "How many of these pills should be taken each day?"
6. (If the answer to item 4⁵ was incorrect, give the correct answer.)
"Put that many pretend pills into the correct section of the chart for today."
(Remove the plastic pill from the chart and put it back in the pile.)

1 pill into 8:00 p.m. square for 1 day

CAUTION: Do not leave patient unattended with pretend pills.

Screening Tool

City Pharmacy • (413) 742-6714

257 North Main Street Jones City, MI, USA 49241-2311

HELMMA PETERSON
TAKE ONE TABLET
THREE TIMES DAILY
SENOKOT TABLETS #14
DR HAND
EXP. 3/9/99 RFL LEFT 1

Screening Tool

Subtest 6. UNDERSTANDING MEDICINE LABELS Continued

In Items 7 and 8, to avoid guessing on "yes-no" questions, the patient must point to or say the words that give the answer.

7. "Can you get a refill?"
8. "Would this prescription be good in June of _____?" (State 1 year ahead of current year.)
9. (Point to the medicine label.) "How many of these pills should be taken each day?"
10. (If the answer to item 9 was incorrect, give the correct answer.)
"Put that many pretend pill into the correct sections of the chart for today."

3 pills, each in a
different square for 1 day
TOTAL POINTS: 10

CAUTION: Do not leave patient unattended with pretend pills.

ANSWER

Yes (point or say)
No (point or say)

- - - 3

Scoring the Screening

- Performance Level 1: High probability of independent functioning on this task
- Performance Level 2: Indication of need for some level of assistance on this task, needs further exploration
- Performance Level 3: High probability that the patient is not able to function independently on this task

- Scoring the Screening
- Subtest 6 "UM" (Understanding Medicine)
- Find Correct Age and Raw score to find performance level

Assessment

- "Medication Management Instrument for Deficiencies in the Elderly (MedMAIDE)"
- Denise Orwig, M.D.
 - Orwig PhD, Denise, Nicole Brandt PharmD, and Ann Gruber-Baldini PhD. "Medication Management Assessment for Older Adults in the Community." The Gerontologist 46 (2006) : 661-668.
- Name all medications currently taking
 - Prescription, Over-the-counter
- Frequency and Dosage
- Demonstrate how to take medications properly

INDEPENDENT FUNCTIONING RATINGS

Level*	1	2	3	4	5	6	7	8	9	10
	TT	CM	AE	Mp	WC	UM	UC	RI	UF	WM
1	8-10	8-10	9-10	7-10	8-10	9-10	9-10	8-10	9-10	15-20
2	7-7	7-7	7-7	5-5	7-7	7-8	7-8	5-5	5-5	5-5
3	0-5	0-5	0-6	0-4	0-5	0-6	0-6	0-5	0-6	0-12
Ages 65+ years										
1	8-10	7-10	8-10	6-10	7-10	8-10	8-10	8-10	8-10	14-20
2	7-7	7-7	7-7	5-5	5-5	5-7	5-7	5-7	5-7	11-15
3	0-5	0-4	0-5	0-3	0-4	0-5	0-5	0-5	0-5	0-10

*1 = High probability of independent functioning on this task; 2 = indicator of need for some level of assistance on this task, needs further exploration; 3 = high probability that the patient is not able to function independently on this task. Note: TT = Taking Time; CM = Clock Management; AE = Answering Questions; Mp = Medication Preparation; WC = Writing a Calendar; UM = Understanding Medicine Label; UC = Using a Calendar; RI = Reading Instructions; UF = Using the Telephone; WM = Writing a Phone Message.

Assessment

- Safety Awareness
 - Taking medications at the wrong time
 - Taking the wrong dosage of medications
 - Expiration dates
 - Spouse medications are present
 - Safe places to store medications (away from grandchildren!)
 - Pills with special requirements (stores away from light, kept in cool place)

Short Term Goals

- STG: Patient will interpret prescription labels by identifying dosage, frequency, prescription and independently with 100% accuracy for increased safety and compliance with self-administration of prescription medications. - Why 100%?
- STG: Patient will sort medications independently with 100% accuracy for increased safety with self-administration of prescription medications.
- STG: Patient will verbally identify current prescription medications and reason for taking with 100% accuracy for increased safety with medications.
- STG: Patient will identify solutions to safety awareness scenarios with 100% accuracy for increased safety with self-administration of prescription.

Long Term Goals

- LTG: Patient will complete medication management tasks with 100% accuracy for increased safety and independence with self medication administration.
- LTG: Patient will utilize medication management mechanisms with 100% accuracy for improved safety with medications at home independently.
- LTG: Patient will perform medication management tasks with 100% accuracy for decreased errors with prescription medications and increased safety.

Treatment

- Practice Label Interpretation
 - Research shows that the elderly population has more difficulty when "the physician writes prescriptions in hourly intervals." (Hanchak et al, 325)
 - "Take one pill every eight hours" is more difficult than "Take one pill 3 times a day"

Treatment

- Explain Medication Management Mechanisms
 - Why should they use this?
 - Their own method is much more effective!
 - Best place to store a mechanism at home
 - Where to purchase a medication mechanism
 - Different types of medication mechanisms
 - Pill boxes
 - Paper charts

Medication Tracking

Log

- Utilized to track the different medications that are being taken
 - Include: Name, dosage amount, and times needed to be taken
- Reason for the medication
- Why it is important to continue taking the medication

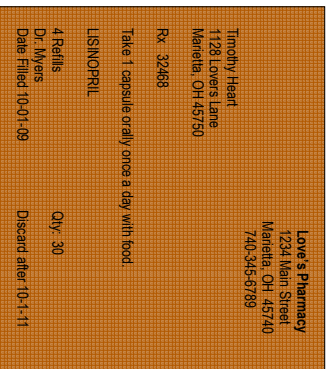
Treatment



Treatment

- Sample Prescription Labels
 - Can use samples or create Patient specific labels
 - Some Patients struggle with abstract task of sample prescriptions

Sample Prescription Label



Treatment

- Patient's ability to demonstrate back
 - Is the Patient able to independently sort medications for correct frequency and dosage?
 - Does the Patient independently re-check work?

Examples

- Marjorie, age 81
- Previously residing independently at home
- Seizure disorder; admitted to hospital d/t Dilantin overdose
- Family request for treatment for increased independence with medications for D/C to Assisted Living
- Administration of "Understanding Medicine Labels" subtest of ALFA
 - Scored "3" on ALFA subtest
 - "High probability that the patient is not able to

Examples

- Dana, age 98
- Previously living independently and responsible for self-administration of medications
- First therapy session, following administration of the "Understanding Medicine Labels" subtest from the Assessment of Language-Related Functional Activities (ALFA)
 - Resident received score of "2"
 - "Indication of need for some level of assistance on this task"

Examples

- Paul, age 81
- Previously residing at home with spouse, self-administering medications
- Scored "3" on ALFA subtest
 - "High probability that the patient is not able to function independently on this task"
- Resident/spouse requesting medication management + n ha

Examples

- Pat, age 74
- Previously living independently at home
- Scored a "2" on the ALFA subtest
- Planning to return home to live independently

Post Test

- 1. What types of residents are appropriate for medication management?
- 2. What test protocols are used in identification of residents in need of medication management?
- 3. What parts of a prescription are the most important?
- 4. What are 3 topics you want to focus on during treatment?
- 5. Is 70% accuracy acceptable for home

QUESTIONS?

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