

MNEMONICS TO ASSESS PATIENTS FOR SELF-CARE: IS THERE A NEED?

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SUMMARY

The use of self-care has increased over the last few decades in the United States. This creates more opportunities for patients to misuse self-care practices, and also amplifies the need for healthcare providers to play active roles in advising patients in appropriate self-care utilization. Healthcare providers, including pharmacists, nurses, and physicians, are key players in recommending and facilitating appropriate self-care behaviors in patients. In these circumstances there are several factors that have to be considered to ensure that the recommendation for self-care, or need for referral, is made appropriately. Several assessment strategies have been documented in the literature to facilitate this process. This paper seeks to identify the need for structured patient assessment methods, particularly in pharmacy practice, as well as to discuss common strategies that have been used in assessing candidates for self-care.

Key words: self-care, assessment, process, mnemonic.

INTRODUCTION

The use of self-care has grown over the last two decades in the United States. In 2012, it is estimated that US consumers spent approximately \$29 billion on nonprescription medicines, compared to \$10 billion in 1990¹. According to a consumer survey conducted in 2010, a majority of Americans prefer to practice self-care for health problems, and almost half felt empowered to self-treat common ailments².

With the increased use of self-care practices and the fact that nonprescription therapies can be purchased from pharmacies and non-healthcare outlets alike in the US, there are increased opportunities for patients to misuse therapies. Many nonprescription medications contain similar ingredients and have the potential to interact with other medications the patient may already be taking^{3,4}. Unintentional overdoses of acetaminophen, for example, are a leading cause of liver injury^{2,3}. Also, approximately half of Americans admit to not reading the drug facts label on nonprescription medications prior to first-time use, and only 20% look for dosing instructions on the labeling^{4,5}. In addition, nearly 1/3 of Americans admit to taking more than the label-recommended dose⁵. These factors increase the need for healthcare providers, especially pharmacists, to be aware of self-care practices and help patients use therapies appropriately.

In order to actively and successfully advise patients who are seeking self-care, pharmacists in particular must be able to obtain specific information from patients and/or caregivers about the current complaint(s), symptom(s), and/or problem(s). While a description of the presenting problem is commonly gathered by pharmacists when they are consulted for self-care assistance, more information is necessary to decide upon an appropriate course of action⁶. Knowledge about previous self-care attempts, whether successful or not, to treat the problem, as well as the patient's other medical conditions and current medications, are essential to identify situations and therapies that are suitable for self-care. However, these last items tend to be neglected in many consultations^{6,7}. Structured checklists or mnemonics may be helpful to improve pharmacists' and other providers' abilities to make appropriate recommendations by increasing the likelihood of obtaining comprehensive information.

Table 1. Mnemonic tools for patient assessment.

PQRST ¹⁰	Palliation and provocation Quantity and quality Region and radiation Signs and symptoms Temporal relations
WWHAM ⁷	Who is the patient? What are the symptoms? How long have the symptoms been present? Action taken by the patient? Medications taken by the patient?
QuEST/SCHOLAR ¹¹	Quickly and accurately assess the patient [through SCHOLAR]. Symptoms Characteristics History Onset Location Aggravating factors Remitting factors Establish that the patient is a self-care candidate. Suggest self-care strategies. Talk with the patient.
CHAPS-FRAPS ¹²	Chief complaint History of present illness Allergies Past medical history Social history (caffeine, alcohol, smoking, etc) Family history Review of other symptoms Assessment Plan SOAP (Documentation) with follow up
Basic 7 ¹¹	Location Quality Severity Timing Context Modifying factors Associated symptoms
AS METHOD ¹¹	Age Self (or is the problem occurring with someone else) Medicines taking Exact symptom or complaint Time or duration of symptoms Taken anything (what has been tried) History of diseases Other symptoms Doing anything to alleviate or worsen condition

PATIENT ASSESSMENT METHODS

Mnemonic tools and checklists have been shown to simplify complex processes, reduce the likelihood of forgetting important aspects in assessment, and improve the quality of care provided⁸. Mnemonics have been incorporated into a variety of healthcare settings from nursing homes to intensive care units as a means to improve communication amongst providers and increase the continuity of care from staff changes as well as in patient encounters^{9,10}. Several mnemonics have been cited for use in self-care situations and these are briefly examined in the following sections (see Table 1)^{7,10-12}.

PQRST

PQRST was developed by Bates and colleagues to aid nursing home staff with telephone communication¹⁰. The 5-letter assessment method was derived from nursing education and intended to provide a common platform for discussion with physicians on the telephone, as well as during daily rounds. In addition to each assessment step, the staff member was instructed to include five basic vital signs: temperature, respiration, pulse, blood pressure, and pain assessment.

The first step in this method is to review palliation and provocation, or what has made or makes the current situation better or worse. This also includes a review of actions taken by the patient for similar problems in the past to alleviate the current symptoms. Step two is to determine quantity and quality. Understanding how much a patient is bothered by the particular symptom, and what type of nuisance the symptom is, can help determine the appropriate diagnosis and treatment. Radiation relates to location of the symptom or problem and whether the current problem has spread to other regions or areas of the body. Next, an assessment of signs and symptoms is conducted and reported. Lastly, temporal relations to the problem or symptom itself should be established. Knowing the events that led up to, occurred simultaneously or even directly after the issue was noticed or began, may be essential to assessing patients accurately, and therefore identifying suitable self-care situations.

WWHAM

WWHAM is an interviewing mnemonic that has traditionally been utilized in the United Kingdom⁷. Each portion of the tool aids the provider in remembering to gather information from the patient in order to accurately assess the situation and/or problem. These include identifying the patient (who), symptoms and duration (what), and any remedies that have been tried previously for the particular symptom(s).

QuEST/SCHOLAR

QuEST/SCHOLAR was developed and presented by Liebowitz and Ginsburg in 2002 as an inclusive process to provide product selection and counseling to patients utilizing self-care¹¹. QuEST provides an outline of the actual patient encounter from gathering information to talking with the patient. SCHOLAR is used during the information gathering stage of QuEST. Other versions of SCHOLAR include the assessment of medications, allergies, and medical conditions.

After obtaining the subjective information from the patient, the provider can then determine whether

it is appropriate for the patient to self-treat and manage the situation. If severe symptoms or other criteria that would prevent safe self-treatment are apparent, the patient is then referred. If self-care is appropriate, providers then are expected to suggest suitable strategies to manage the problem(s), as well as talk with the patient about these recommended strategies. Patients should not only be provided with general care measures and specific products, such as elevating an injured ankle or taking ibuprofen for pain, but also with reasonable expectations as to resolution of symptoms, how to use recommended strategies appropriately, and when follow up should occur.

Others

Another patient interviewing mnemonic that has been used in self-care assessment is CHAPS-FRAPS¹². This tool helps the provider to remember to ask certain questions to facilitate proper assessment of a patient's current complaint or situation. It resembles key components of universal written documentation, the SOAP note. The Basic 7 and AS METTHOD are other tools that have been used to assess patients during self-care situations¹¹. Similar to the previously discussed tools, these mnemonics serve to guide users through obtaining necessary information in the assessment scenario.

Overall, these mnemonic tools elicit similar information from the patient such as current symptoms, location and duration of the current ailment, and aggravating or remitting factors^{7,10-12}. However, no strategy is totally comprehensive. Only WWHAM and AS METTHOD specifically ask who the patient is. Many times, the person presenting for self-care advice or selecting nonprescription medicines is not who the product is actually intended for. If the provider does not specifically ask about whom the intended recipient of the self-care practice is, incorrect assumptions and observations could be applied and factored into the processes of making decisions and recommendations. Also, pregnancy is not specifically addressed in the methods presented. Providers may account for this factor when asking about other health or medical conditions, but the lack of such specific identification in mnemonics may also increase the likelihood of providers not remembering or overlooking the need to determine pregnancy status.

In the literature, the most common strategies found are PQRST, WWHAM, and QuEST/SCHOLAR^{6,7,10,11}. The use of these strategies has been documented in the pharmacy setting by pharmacists as well as medicine counter assistants who are responsible mainly for supplying nonprescription medicines in the UK⁶. Of these, only QuEST extends beyond the actual patient assessment scenario and directs the provider or pharmacist further to select appropriate treatment strategies and counsel or talk with the patient about proper use¹¹. Given the number of people who admit to taking more than the recommended dose of nonprescription medications as well as the number of people who are unlikely to read the drug facts label prior to use^{4,5}, pharmacists and other providers should educate patients at every opportunity as to dosage, potential side effects, and duration of use after a product is selected. Only QuEST specifically incorporates all aspects of the patient encounter. Other assessment or interviewing mnemonics, such as PQRST or WWHAM, could likely be incorporated into QuEST in lieu of SCHOLAR if a pharmacist or provider is more familiar with these other tools.

DISCUSSION

It is vital to appropriately assess patients who are interested in self-care. Patients who are not candidates for self-care, such as those with severe symptoms, should be referred. Structured strategies like mnemonic devices provide a systematic approach for providers to obtain accurate and more complete information in a given situation^{5,7-12}. Use of mnemonic devices has also been shown to improve decision making in training, or simulated scenarios in the classroom^{8,11}. Pharmacy students who used a mnemonic tool to assess drug therapy in a pharmacotherapy course were more likely to score higher on a case-based exam than students who did not use the tool⁸. Also, use of a mnemonic device increased pharmacy students' ability to select appropriate nonprescription therapies during patient scenarios¹¹. While not directly translatable, this indicates that use of such a tool may increase appropriate selection of therapies and potentially decrease the rate of medical or medication errors in practice.

Standardized or simulated patient scenarios have also been used to determine whether enough information was gathered by pharmacists and pharmacy staff to make proper recommendations in pharmacy settings^{6,7}. Pharmacists and pharmacy staff who asked more WWHAM-type questions were more likely to correctly assess each scenario than those who asked fewer questions. However, one study suggests that such questions may not be enough to gather essential information in self-care situations and that more historical information may be needed from each presenting patient⁷. Both articles noted the need for a more standardized approach to assessing situations in order to make appropriate recommendations and decrease errors^{6,7}. Mnemonics can provide a systematic approach to the information gathering process and potentially improve the quality of care provided.

Several reasons may be given as to why such a standardized, systematic approach is not widely utilized in practice currently. These include limited time to implement such tools, little to no training with using the tools, or no perceived need for such an approach. The tools with more steps are likely to take longer to complete, therefore preventing some providers' adoption of these tools in all situations or patient scenarios encountered. It is also expected that more time would be needed to accurately use each tool when first incorporating into practice. Patient acceptance of the time required to fully administer any of the presented tools may likewise be a barrier to practice implementation. While patients expect to spend at least ten to twenty minutes at the physician's office¹³, many are only willing to spend five minutes with a pharmacist to discuss nonprescription therapy¹⁴.

Many healthcare providers establish a routine that aids in performing patient care and related duties¹⁵. Pharmacists who were trained to incorporate prime questions into patient encounters acknowledged that previous routine, workflow, and time impacted the ability to incorporate a new method of counseling, but that these barriers could be overcome. Deviating from routine can be challenging and time-consuming initially, but continued practice and experience with any of these mnemonic devices will lend to the establishment of a new routine, and, potentially, more comprehensive care¹⁵. In addition, increased use and proficiency with a particular mnemonic device or process may actually reduce the time spent by the provider during subsequent patient encounters⁸, or at least make them more effective.

There is no documentation of mnemonic comparisons to determine if using any particular tool is more effective than others in self-care situations. Since patient safety and the provision of quality care should be the priority, one would argue that the longer, more comprehensive tools may be preferred, albeit using more time. Strong evidence of improved safety or quality of care with specific tools presented in this paper is lacking however.

Another limitation to incorporating mnemonics into practice is that not all patients ask for advice or help when investigating self-care options⁵. In addition, the majority of patients consider nonprescription therapies very safe⁴. However, unintentional overdoses of acetaminophen and other adverse events and complications continue to be linked to the use of OTC analgesics, especially in high-risk patients^{2,3,16-18}. Providers, especially pharmacists, may be able to help reduce these adverse outcomes by assessing patients for appropriate use with the aid of a mnemonic device and then educating them as it relates to each particular situation and medication therapy.

Current approaches to assessment of presenting patients are not fully successful, as pharmacists and other providers tend to not ask enough relevant questions of presenting patients^{6,7}. Each patient encounter is different and should be treated as such. Incorporation of a systematic approach for patient assessment is not intended to diminish providing patient-centered care. Tailoring one or more of the methods available to fit each encounter is encouraged, as long as the basic principles of assessment are present to facilitate the decision making process. Some providers may find that a pen and paper or electronically-stored checklist with each step is helpful, and this may also aid in documentation of the encounter if needed. Alternatively, memorization of each step may be preferred, especially for tools with fewer components. No matter the method chosen, providers need to consider and incorporate more comprehensive methods of assessment into practice to ensure quality care during self-care situations. Use of one of the mnemonics presented, whether in full or shortened format, during each patient encounter is encouraged to so that it becomes habit or routine.

CONCLUSION

As the use of self-care continues to increase, so do the opportunities for providers to make certain self-care is used correctly. Because patients can purchase OTC analgesics, gastrointestinal agents, and antihistamines at grocery stores, gas stations, and other non-healthcare facilities in the US, assessment and education of patients' self-care practices and nonprescription medicine use can be difficult. This expanded availability should encourage providers to communicate with patients the importance of proper self-care strategies at each encounter. A method such as QuEST that incorporates the entire process may be useful even in non-ailment specific scenarios, such as when patients present for follow-up or wellness checks. The last piece of this mnemonic directs providers to 'Talk with patients'. Talking with patients at each encounter about the potential dangers of nonprescription medications or self-care therapies if used inappropriately or in the wrong situations may help avoid misuse in the future. Ultimately, use of these tools can aid the provider in obtaining information from patients in immediate need circumstances, and improve the quality of care.

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