Katz Index of Independence in Activities of Daily Living (ADL)

By: Meredith Wallace, PhD, APRN, BC, Fairfield University School of Nursing, and Mary Shelkey, PhD, ARNP, Virginia Mason Medical Center

WHY: Normal aging changes and health problems frequently show themselves as declines in the functional status of older adults. Decline may place the older adult on a spiral of iatrogenesis leading to further health problems. One of the best ways to evaluate the health status of older adults is through functional assessment which provides objective data that may indicate future decline or improvement in health status, allowing the nurse to intervene appropriately.

BEST TOOL: The Katz Index of Independence in Activities of Daily Living, commonly referred to as the Katz ADL, is the most appropriate instrument to assess functional status as a measurement of the client’s ability to perform activities of daily living independently. Clinicians typically use the tool to detect problems in performing activities of daily living and to plan care accordingly. The Index ranks adequacy of performance in the six functions of bathing, dressing, toileting, transferring, continence, and feeding. Clients are scored yes/no for independence in each of the six functions. A score of 6 indicates full function, 4 indicates moderate impairment, and 2 or less indicates severe functional impairment.

TARGET POPULATION: The instrument is most effectively used among older adults in a variety of care settings, when baseline measurements, taken when the client is well, are compared to periodic or subsequent measures.

VALIDITY AND RELIABILITY: In the thirty-five years since the instrument has been developed, it has been modified and simplified and different approaches to scoring have been used. However, it has consistently demonstrated its utility in evaluating functional status in the elderly population. Although no formal reliability and validity reports could be found in the literature, the tool is used extensively as a flag signaling functional capabilities of older adults in clinical and home environments.

STRENGTHS AND LIMITATIONS: The Katz ADL Index assesses basic activities of daily living. It does not assess more advanced activities of daily living. Katz developed another scale for instrumental activities of daily living such as heavy housework, shopping, managing finances and telephoning. Although the Katz ADL Index is sensitive to changes in declining health status, it is limited in its ability to measure small increments of change seen in the rehabilitation of older adults. A full comprehensive geriatric assessment should follow when appropriate. The Katz ADL Index is very useful in creating a common language about patient function for all practitioners involved in overall care planning and discharge planning.

MORE ON THE TOPIC:

Permission is hereby granted to reproduce, post, download, and/or distribute, this material in its entirety only for not-for-profit educational purposes only, provided that The Hartford Institute for Geriatric Nursing, College of Nursing, New York University is cited as the source. This material may be downloaded and/or distributed in electronic format, including PDA format. Available on the internet at www.hartfordign.org and/or www.ConsultGeriRN.org. E-mail notification of usage to: hartford.ign@nyu.edu.
Katz Index of Independence in Activities of Daily Living

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>INDEPENDENCE:</th>
<th>DEPENDENCE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>POINTS (1 OR 0)</td>
<td>(1 POINT)</td>
<td>(0 POINTS)</td>
</tr>
<tr>
<td>BATHING</td>
<td>NO supervision, direction or personal assistance</td>
<td>WITH supervision, direction, personal assistance or total care</td>
</tr>
<tr>
<td>POINTS:___________</td>
<td>(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.</td>
<td>(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.</td>
</tr>
<tr>
<td>DRESSING</td>
<td>(1 POINT) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.</td>
<td>(0 POINTS) Needs help with dressing self or needs to be completely dressed.</td>
</tr>
<tr>
<td>POINTS:___________</td>
<td>(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.</td>
<td>(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.</td>
</tr>
<tr>
<td>TOILETING</td>
<td>(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.</td>
<td>(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.</td>
</tr>
<tr>
<td>POINTS:___________</td>
<td>(1 POINT) Exercises complete self control over urination and defecation.</td>
<td>(0 POINTS) Is partially or totally incontinent of bowel or bladder.</td>
</tr>
<tr>
<td>CONTINENCE</td>
<td>(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.</td>
<td>(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.</td>
</tr>
<tr>
<td>FEEDING</td>
<td>(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.</td>
<td>(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.</td>
</tr>
<tr>
<td>POINTS:___________</td>
<td>(1 POINT) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.</td>
<td>(0 POINTS) Needs help with dressing self or needs to be completely dressed.</td>
</tr>
<tr>
<td>TRANSFERRING</td>
<td>(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.</td>
<td>(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.</td>
</tr>
<tr>
<td>POINTS:___________</td>
<td>(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.</td>
<td>(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.</td>
</tr>
<tr>
<td>CONTINENCE</td>
<td>(1 POINT) Exercises complete self control over urination and defecation.</td>
<td>(0 POINTS) Is partially or totally incontinent of bowel or bladder.</td>
</tr>
<tr>
<td>FEEDING</td>
<td>(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.</td>
<td>(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.</td>
</tr>
</tbody>
</table>

TOTAL POINTS = _____ 6 = High (patient independent) 0 = Low (patient very dependent)

You quickly note some loss of strength in Ms. Clyde: she needs help getting out of bed and using the toilet and shower. On the positive side, she can feed and dress herself without difficulty and is continent.

The Katz index helps to organize these observations into a clinically useful framework, yielding numeric scores that sum up a patient’s functional status. The instrument employs a dichotomous (yes-no) scale, with 1 point given for each ADL in which the patient is independent and 0 points given for each ADL in which the patient is dependent. The highest possible score is 6, signifying independence in all ADLs; the lowest is 0, meaning the patient needs help with every activity. Ms. Clyde can eat, remain continent, and dress independently, but she needs help in transferring, toileting, and bathing. This gives her a Katz index score of 3: moderate dependence.

ADAPTING THE KATZ INDEX IN DIFFERENT SETTINGS
The Katz index has been used successfully with long-term care residents, albeit with some adaptation. Older adults often have far more complicated needs than Ms. Clyde does, with clinical or cultural considerations into a clinically useful framework, yielding numeric scores that sum up a patient’s functional status. The instrument employs a dichotomous (yes-or-no) scale, with 1 point given for each ADL in which the patient is independent and 0 points given for each ADL in which the patient is dependent. The highest possible score is 6, signifying independence in all ADLs; the lowest is 0, meaning the patient needs help with every activity. Ms. Clyde can eat, remain continent, and dress independently, but she needs help in transferring, toileting, and bathing. This gives her a Katz index score of 3: moderate dependence.

ADAPTING THE KATZ INDEX IN DIFFERENT SETTINGS
The Katz index has been used successfully with long-term care residents, albeit with some adaptation. Older adults often have far more complicated needs than Ms. Clyde does, with clinical or cultural characteristics that require one’s judgment in using the tool. Among the challenges are language barriers, dementia, and other conditions that interfere with communication or cognition.

Although the Katz index assesses ADLs that are not language dependent, interpreters may be needed to ask older patients to perform specific activities or to explain the basis for their refusal. Confusion, whether from dementia, delirium, or simple disorientation caused by illness, may mean that older patients can’t follow instructions to dress, use the toilet, or bathe. The Katz index measures current functional ability in any patient, regardless of cognitive status. Any inability noted in the six ADLs, whether caused by mental or physical incapacity, must be given a score of 0 points. The central element in scoring the Katz index is patients’ ability to demonstrate functional independence to a clinician. If they can’t perform an ADL—for whatever reason—they must be scored as dependent in that category. Even patients with sensory impairment, amputation, or neurologic disorders are scored on current ability.

There may also be environmental challenges to using the Katz index. Some hospitals and skilled nursing facilities don’t have bathing facilities or toilets readily available, making assessment in these areas difficult. Moreover, some nursing staff assist older adults with ADLs simply to save time, even when the patients are capable of performing them independently. It’s critical that all nursing staff encourage older adults to remain as independent as possible. Using the Katz index in acute care settings may require a new institutional emphasis on the nursing staff’s responsibility to support patients’ functional independence. (To view the section of the online video discussing assessment, interpretation, and discharge planning, go to http://links.lww.com/A242.)

COMMUNICATING THE KATZ INDEX RESULTS
The results of a functional assessment using the Katz index should be shared with the clinical team, the patient, and family members; they all have roles to play in improving function. Patients and family members in particular need a clear explanation of what the score means and what work the patient must do to achieve independence or, if that’s not possible, to make good use of assistance. This usually requires an explanation of the categories assessed—for example, explaining remaining continent as “controlling your bladder and bowels” or transferring as “getting in and out of bed or up from a chair by yourself.” It’s also important to explain how functional status relates to living independently and how the plan of care aims to restore independence. The plan of care will likely involve ongoing nursing assessment and care to restore function and prevent further decline, as well as referral to physical and occupational therapists, if necessary.

Explaining Katz index scores to patients may require extra effort when particular barriers are present: insufficient fluency in English, hearing or other sensory impairment, aphasia, delirium, or dementia. Facing the patient, using pencil and paper or computer printouts, asking the patient to repeat what was said, and being alert for nonverbal indicators of comprehension may help to ensure that the Katz index results have been successfully communicated.

Nurses should be vigilant about ensuring that any changes in a patient’s functional status are communicated to the clinical team and that the plan of care is modified as the patient’s abilities improve or decline. In communicating results to a team whose members may not be familiar with the Katz index, a nurse may simply summarize the results. In the case

Watch It!
Go to http://links.lww.com/A241 to watch a nurse assess an older adult’s functional status and discuss how to intervene when abilities are compromised.

View this video in its entirety and then apply for CE credit at www.nursingcenter.com/AJNolderadults; click on the How to Try This series link. All videos are free and in a downloadable format (not streaming video) that requires Windows Media Player.
Validity. The Katz index has demonstrated accuracy in predicting functional outcomes over time among older adults in short-term care, hospitalized patients, and patients who have had a stroke.1, 3, 17 Hamrin and Lindmark reported convergent (or concurrent) validity as high, with a correlation of 0.95 between the Activity index and the Katz index.3

No specific studies of specificity and sensitivity of the Katz Index were found in the literature. For more information on the psychometric properties of the Katz index, go to http://links.lww.com/A410.

Meredith Wallace is an associate professor at the Yale University School of Nursing, New Haven, CT, and Mary Shelkey is a geriatrics specialist at Virginia Mason Medical Center, in Seattle. Contact author: Meredith Wallace, meredith.wallace@yale.edu. The authors of this article have no significant ties, financial or otherwise, to any company that might have an interest in the publication of this educational activity. The Katz Index of Independence in Activities of Daily Living is reproduced with the permission of the Gerontological Society of America.

How to Try This is a three-year project funded by a grant from the John A. Hartford Foundation to the Hartford Institute for Geriatric Nursing at New York University’s College of Nursing in collaboration with AJN. This initiative promotes the Hartford Institute’s geriatric assessment tools, Try This: Best Practices in Nursing Care to Older Adults: www.hartfordign.org/trythis. The series will include articles and corresponding videos, all of which will be available for free online at www.nursingcenter.com/A1Nolderadults. Nancy A. Stotts, EdD, RN, FAAN (nancy.stotts@nursing.ucsf.edu), and Sherry A. Greenberg, MSN, APRN,BC, GNP (sherry@familygreenberg.com), are coeditors of the print series. The articles and videos are to be used for educational purposes only.

Routine use of Try This approaches or tools may require formal review and approval by your employer.

REFERENCES


GENERAL PURPOSE: To instruct registered professional nurses in the use of the Katz Index of Independence in Activities of Daily Living, used to measure older patients’ capacity for self-care.

LEARNING OBJECTIVES: After reading this article and taking the test on the next page, you will be able to
• review the background information helpful for understanding the need for assessing functional ability in older adults.
• outline the appropriate use of the Katz index.
• list the advantages and disadvantages of using the Katz index.

TEST INSTRUCTIONS
To take the test online, go to our secure Web site at www.nursingcenter.com/CE/ajn.

To use the form provided in this issue,
• record your answers in the test answer section of the CE enrollment form between pages 56 and 57. Each question has only one correct answer. You may make copies of the form.
• complete the registration information and course evaluation. Mail the completed enrollment form and registration fee of $21.95 to
  Lippincott Williams and Wilkins CE Group, 2710 Yorktowne Blvd., Brick, NJ 08723, by April 30, 2010. You will receive your certificate in four to six weeks. For faster service, include a fax number and we will fax your certificate within two business days of receiving your enrollment form. You will receive your CE certificate of earned contact hours and an answer key to review your results. There is no minimum passing grade.

DISCOUNTS and CUSTOMER SERVICE
• Send two or more tests in any nursing journal published by Lippincott Williams and Wilkins (LWW) together, and deduct $0.95 from the price of each test.
• We also offer CE accounts for hospitals and other health care facilities online at www.nursingcenter.com. Call (800) 787-8985 for details.

PROVIDER ACCREDITATION
LWW, publisher of AJN, will award 2 contact hours for this continuing nursing education activity. LWW is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation. LWW is also an approved provider of continuing nursing education by the American Association of Critical-Care Nurses #00012278 (CERP category A), District of Columbia, Florida #FBN2454, and Iowa #75. LWW home study activities are classified for Texas nursing continuing education requirements as Type 1. This activity is also provider approved by the California Board of Registered Nursing, provider number CEP 11749, for 2 contact hours. Your certificate is valid in all states.

TEST CODE: AJNTT14

CE 2 HOURS

Continuing Education

EARN CE CREDIT ONLINE

Go to www.nursingcenter.com/CE/ajn and receive a certificate within minutes.

GENERAL PURPOSE: To instruct registered professional nurses in the use of the Katz Index of Independence in Activities of Daily Living, used to measure older patients’ capacity for self-care.

LEARNING OBJECTIVES: After reading this article and taking the test on the next page, you will be able to
• review the background information helpful for understanding the need for assessing functional ability in older adults.
• outline the appropriate use of the Katz index.
• list the advantages and disadvantages of using the Katz index.

TEST INSTRUCTIONS
To take the test online, go to our secure Web site at www.nursingcenter.com/CE/ajn.

To use the form provided in this issue,
• record your answers in the test answer section of the CE enrollment form between pages 56 and 57. Each question has only one correct answer. You may make copies of the form.
• complete the registration information and course evaluation. Mail the completed enrollment form and registration fee of $21.95 to
  Lippincott Williams and Wilkins CE Group, 2710 Yorktowne Blvd., Brick, NJ 08723, by April 30, 2010. You will receive your certificate in four to six weeks. For faster service, include a fax number and we will fax your certificate within two business days of receiving your enrollment form. You will receive your CE certificate of earned contact hours and an answer key to review your results. There is no minimum passing grade.

DISCOUNTS and CUSTOMER SERVICE
• Send two or more tests in any nursing journal published by Lippincott Williams and Wilkins (LWW) together, and deduct $0.95 from the price of each test.
• We also offer CE accounts for hospitals and other health care facilities online at www.nursingcenter.com. Call (800) 787-8985 for details.

PROVIDER ACCREDITATION
LWW, publisher of AJN, will award 2 contact hours for this continuing nursing education activity. LWW is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation. LWW is also an approved provider of continuing nursing education by the American Association of Critical-Care Nurses #00012278 (CERP category A), District of Columbia, Florida #FBN2454, and Iowa #75. LWW home study activities are classified for Texas nursing continuing education requirements as Type 1. This activity is also provider approved by the California Board of Registered Nursing, provider number CEP 11749, for 2 contact hours. Your certificate is valid in all states.

TEST CODE: AJNTT14