

**Nursing Home Nurses' Knowledge and
Attitudes Toward Urinary Incontinence**

by

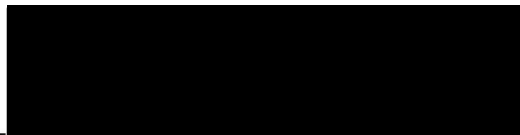
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A Master's Research Project

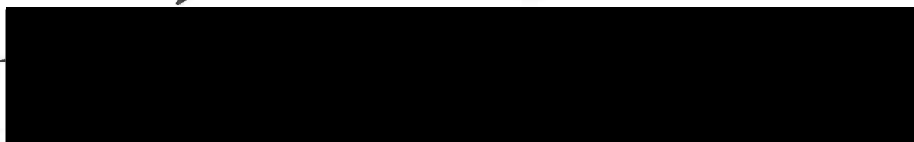
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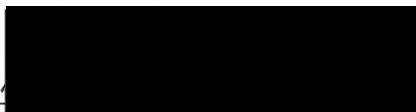
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CHAPTER I

Introduction

In 1988, a group of experts from various disciplines met to discuss the current state of knowledge regarding urinary incontinence. According to Resnick and Ouslander (1990), two critical points emerged from that conference. First, although prevalent, urinary incontinence is not a normal process of aging but a symptom of an underlying problem. Second, incontinence can frequently be cured, usually improved and always managed. The negativism and acceptance that often accompany urinary incontinence are unjustified impediments to caring effectively for incontinent persons.

Current prevalence rates suggest that 30% of community-living elderly, 35% of hospitalized elderly, and 50% of nursing home residents experience urinary incontinence (Herzog & Fultz, 1990; Seir, Ouslander, & Orzek, 1987; and Mohide, 1986). Thus, of the nearly 2 million nursing home beds in the United States, 1 million of these residents experience urinary incontinence. Further, it is expected that the need for nursing home care will increase over the next several decades, primarily because there is an increasing number of elderly people especially in those over 85 years of age, and a decreasing number of family members who are able to care for them in the community. Currently, 25 billion dollars are spent annually on nursing home care, of which 3.3 billion is spent in the management of incontinence (Hu, 1990).

The high rate of urinary incontinence in nursing homes directly impacts the workload of nursing staff providing basic care to residents. Yet in a survey of over 2,000 registered nurses working with the elderly in various settings, only 7.3% of respondents to the survey listed incontinence as an important clinical issue (ANA, 1986). Of ten clinical problems, nurses ranked incontinence as the seventh in importance. Reid (1976) made the observation that nurses often

inappropriately focus on the management of soiling rather than on the management of incontinence. In other words, incontinence is viewed as a problem in how to efficiently clean patients rather than a health problem that needs to be improved. Tarrier and Lerner's (1983) study reported that although behavior modification improved the toileting behavior of patients on a geriatric ward, the nursing staff's subjective impressions were that patient behavior had not improved.

Although the link between attitudes and behavior is difficult to quantify, La Monica (1979) concluded that attitudes have a positive relationship to behavior. Nurses having positive attitudes toward elderly are more interested in giving them nursing care. Nursing staffs' impressions or attitudes toward the elderly in general, however, have expressed negative attitudes toward the elderly (Campbell, 1971; Gunter, 1971; Hart, Freel, & Crowell, 1976; Heller & Walsh, 1976). In addition, individuals who work with the elderly have been found to hold a greater number of negative stereotypes than those working with younger age groups (Hart et al., 1976; Tobiasson, Knudsen, Stengel, & Gliss, 1979). Additional studies (Campbell, 1971; Gillis, 1973; Meyer, Hassanein, & Bahr, 1980) suggest health care individuals with a higher educational level demonstrate more negative attitudes toward the elderly and are less interested in working with this population.

Mittiness (1990) reported that few systematic investigations of knowledge, beliefs and attitudes toward incontinence have been done among health-care professionals. A recent study by Yu and Kaltreider (1987) evaluated nursing staff's attitudes and their responses to incontinence in nursing home patients. They found that nursing staff described urinary incontinence care as frustrating, time-consuming, and aesthetically unpleasant. It was unclear, however, if the nurses' educational background contributed

negatively or positively to these impressions or if staff were influenced in answering in a socially desirable manner.

This study will examine the effect nurses' educational level had on their attitudes and knowledge toward urinary incontinence. In addition, a social desirability scale will be added to determine if the response set bias of social desirability plays a role in the way nurses respond to an attitude scale on urinary incontinence.

Review of Literature

Studies surrounding urinary incontinence have been prolific in both the nursing and medical literature. The National Institute of Health convened a conference to discuss the current knowledge on urinary incontinence in 1988. The conference was needed because of the rapid advances made in urinary incontinence diagnosis and treatment. (Resnick & Ouslander, 1990)

Several studies of residents in nursing homes have attempted different therapies in order to keep patient continent of urine. Some of these therapies include biofeedback, bladder retraining, and prompted and timed voiding. Petrilli, Traugher and Schnelle (1988) found that nursing implementation of prompted voiding dramatically improved incontinence within the geriatric population. But, once patients are taught to request toileting assistance, two key issues remain. First, there needs to be consistent positive reinforcement to maintain the patient's request for toileting. Second, there is a continual challenge to keep staff motivated to provide toileting assistance over a long period of time.

While some studies reported interventions that have been successful in the improvement of incontinence, several articles stress the importance of nursing's role. Burgio and Burgio (1986) state that the research on urinary incontinence effectiveness is encouraging; however, an often neglected area of

research is the evaluation of behaviors by nurses giving direct urinary incontinence care. In addition, the structures and incentives needed to ensure that behaviors are performed consistently over time need further research. Thus, future studies need to evaluate the procedures for managing the staff who care for the incontinent patients.

Igou (1986) describes four functions that are critical for staff to improve motivation in implementing a toileting program accurately: knowledge, decision-making, persuasion, and confirmation. In addition, she suggests that staff should be an active part of the decision-making process to promote greater compliance with treatment and management. Creason, et al., (1989) actively involved staff and still had difficulty with compliance. Her study evaluated prompted voiding in female residents in nursing homes. She found that prompted voiding was successful; however, her study identified similar difficulties to those difficulties identified by Schnelle et al., (1983) and Colling, Ouslander, Hadley, Eisch and Campbell, (1989). Compliance by the nursing staff was identified as a problem in each study that ultimately affected their results.

Attitudes of Nurses Toward the Elderly

Rokeach (1968) defines attitude as an organization of beliefs, each belief containing three components: cognitive, affective, and behavioral. It is difficult to isolate each component, but they have a close relationship to each other with respect to attitudes.

In an attempt to link attitudes with behavior, Snyder and Kendzierski (1982) conducted a study to determine if a change in attitude would result in a behavioral change. Their results show that an attitude change will lead to sustained behavioral change when attitude and behavior are linked by an action that makes the attitude relevant to an appropriate action. The authors

use affirmative action policies as an example. It is not sufficient to persuade others to accept the positive values of the policies and procedures for affirmative action. To assure a change in behavior by influencing attitudes, one would need to convince individuals that having positive attitudes toward affirmative action entails engaging in behaviors that implement the policies and procedures in a meaningful way. New attitudes result in new behavior when individuals see that believing means doing.

Taylor and Harned (1978) studied the attitudes of nurses who cared for the elderly either directly or indirectly. The authors used Kogan's Attitude Toward Old People Scale which provides two scores that measure the attitudinal views toward the elderly. The sample included 71 registered nurses who participated in a conference on care of the elderly. The authors reported no negative attitudes toward the elderly. All attitudes ranged from neutral to positive on the Old People Scale. However, this study was the first to raise the question of a possible link between experience of the nurse and their attitude toward the elderly. Because their sample was derived from a population that was attending a conference on the care of the elderly, the attitudinal results may not reflect the negative attitudes of those nurses who chose not to attend the conference. The authors do not offer an explanation for their finding between years of experience and positive attitudes.

Benson (1982) provided an objective review of nursing personnel and nursing students' attitudes. She found nurses' attitudes toward the elderly are similar to those of society as a whole, which is characterized by negativism and stereotyping. In a review article of attitudes toward the elderly, she found that professional nursing is committed to the improvement of health care for the elderly. An area of continued importance is the fostering of positive attitudes among nurses toward the elderly in view of pervasive ageism in our society.

Her review of the nursing literature over the last fifteen years identified an increasing awareness of geriatric issues by nurse clinicians and educators. A common thread is that positive attitudes toward the elderly are linked to better learning experiences about elderly people in basic nursing education programs. Thus, education in nursing curricula focusing on geriatric issues may lead to more positive attitudes among nurses toward this population.

Attitudes of Nurses Toward Urinary Incontinence Management

Only three studies have been done which specifically examine nurses attitudes toward urinary incontinence management. Yu and Kaltreider (1987) described the development and pilot of a questionnaire specifically directed at measuring the stress nursing home staff experience while working with incontinent patients (Incontinence Stress Questionnaire-Staff Response). Staff reported feeling negative reactions at least some of the time: 60% to 70% felt frustrated, tired, discouraged, and irritable, 38% to 43% felt depressed about their work and about the extra work in dealing with urinary incontinence, and 20% felt like resigning from their job because of patient's urinary incontinence. In addition, 45% of the participants reported that at least some of the time they disliked changing wet clothes and bedding, and 80% sometimes disliked the odor associated with urinary incontinence.

Respondents were invited to make general comments at the completion of the questionnaire. Yu and Kaltreider identified that their comments fell into three categories.

"Some staff were upset with incontinent patients:

- I get frustrated when I feel a patient is doing it purposefully and could control it.

- I get most frustrated (angry) with people (patients) who know when they have to go and wet themselves because they don't feel like getting up to use the toilet.
- I am unable to express my feelings due to negative reaction.

Others viewed the incontinence matter-of-factly:

- It is so common in a nursing home you just expect it and clean it up.

Still others blamed nursing care givers or staff shortages:

- I get very frustrated with other staff members because of their negative attitudes toward the problem.
- There wouldn't be any need for studying incontinent residents if there was enough nursing care. It is due to lack of help. I've watched over the years and see how, and why, a resident becomes incontinent: nurses not taking them to the bathroom, not having time if the aides are busy. The patient has no one else to take them to the bathroom. If the nurses will not take them, what else can they do but wet? It isn't the age, it's the care a lot of times."

The authors conclude the results suggest that nursing home staff experience both positive and negative feelings toward urinary incontinence. Their article documents for the first time what the literature has suggested: health care providers in many nursing homes experience psychological stress in connection with urinary incontinence management.

Colling et al. (1989) in a study on patterned urge response toileting (PURT) for urinary incontinence, utilized the Incontinence Stress Questionnaire-Staff Response (ISQ- SR) developed by Yu and Kaltreider (1987). The means

for individuals within her study were overwhelmingly toward the positive feelings end of the scale, 90% of the responses were in the two most positive categories. In only three items did a third of the responses tend toward the negative end of the scale: 33% did not feel sorry for incontinent patients, and 36% responded negatively to the item "Like working with incontinent patients."

There are some interesting differences in the results of the two studies. Yu and Kaltreider had variability in the responses and in Colling's study, 90% of the responses were in the two most positive categories. In Yu and Kaltreider's study, 45% disliked changing wet beds as opposed to 16% in Colling's Study. Yu's study reported 80% who sometimes disliked the odor where Colling reported only 32% disliking the odor. In terms of job satisfaction, Yu reported 20% felt like resigning from their job and Colling reported 25% said that some of the time they felt like resigning. It is interesting that a lower percentage of respondents in Colling's study reported on the unpleasantness of urinary incontinence, but had a higher percentage of people considering resignation. However, resignations may be due to causes other than urinary incontinence. Both studies maintain that while nurses may have positive feelings toward their patients, their experiences with incontinent patients adds stress and leads to negative reactions.

Colling's study was unique because it was performed in a Teaching Nursing Home where there was a history of collaborative work between university faculty and nursing home staff. Colling used nursing staff from within the nursing homes to implement the toileting program. She found that although administrative personnel were supportive of the study, direct care nursing staff complied with toileting program an average of only 70% (Colling et al., 1989).

Observations made by the research staff support the idea that nursing aides knew how to implement the toileting program, but were resistant to

change their behaviors. If nurses aides felt that a patient was not able to be continent without assistance from the aide, then toileting was not worthwhile. In addition, comments from licensed staff demonstrated more verbal support than behavioral support for the program.

Colling also evaluated the relationship among knowledge, attitudes and compliance; however, no significant relationships were found among these variables. Thus, although staff expressed overwhelming positive attitudes about caring for urinary incontinent residents, and had received a four hour inservice education program on urinary incontinence management, they demonstrated considerable resistance to changing behavior to toilet residents in response to their needs. Instead, staff preferred to stay with their usual routines.

Colling's (1988) article "Educating Nurses to Care for Incontinent Patients," puts forth an equation that may help to understand the importance of the staff nurses willingness to change. She proposes the following equation:

$$\text{Change} = \frac{\text{Motivation} + \text{Capacity}}{\text{Resistance}}$$

Motivation is defined as the commitment an individual feels toward achieving an objective; capacity is the access to the knowledge and skills necessary for carrying out the activity; and resistance is the force which impede the desired goal (DeGregorio, 1984). Resistance is the most difficult to measure but probably the most influential force. It is much easier for nurses to continue with their pre-established routines rather than attempt to incorporate a new behavior. This concept of change is one of the most crucial aspects to assess when attempting to implement a change in behavior.

Tarrier and Larner (1983) also studied nurses attitudes toward incontinence. Negative attitudes on the part of health-care workers resulted in

poor intervention strategies. Although behavior modification actually improved the toileting behavior of patients on a geriatric ward, the nursing staffs' subjective impressions were that patient behavior had not improved.

Social Desirability

Underreporting on attitude scales can be attributed to the concept of social desirability; a tendency for participants to give answers that reflect what is perceived as the "correct" answer rather than what they truly believe or how they feel. In addition, participants may respond according to societal norms rather than their own beliefs. Social desirability is also defined as "the tendency to affirm positive attributes about oneself or deny negative ones" (Cone & Carstenson, 1985). McCrae and Costa (1983) identify that when there are good reasons to portray oneself in a favorable manner, social desirability response sets may be elicited in some or all individuals.

Society instills desirable behavior in almost all individuals (Heilbrum, 1964). Items and scales differ in the desirability of their responses, and response rates are strongly related to estimates of desirability (Edwards, 1957). Social desirability is a potential problem when utilizing scales or items that request unpopular or undesirable information and can result in a response set bias.

In their study, Yu and Kaltreider (1987) questioned whether their respondents underreported their negative feelings toward the patients because our society expects health care providers to feel compassion toward the sick. Although Colling's (1989) study did not address underreporting, 90% of the responses to the ISQ-SR were in the two most positive categories.

Crowne and Marlowe (1960) developed a scale in an attempt to identify persons who respond in a socially desirable manner. The authors defined

social desirability as the need of participants to obtain approval by responding in a culturally appropriate and acceptable manner.

There is literature that both denies and supports the usefulness of social desirability scales. Studies that negate the impact of social desirability have evaluated more global issues such as hopelessness, anxiety, and well-being (Petrie & Chamberlin, 1983; Fisch, 1988; and Komza & Stones, 1987). A study that supported social desirability as a response set focused on a specific disease, AIDS (O'Brien, 1989).

The differences between the response sets in Colling's (1989) and Yu and Kaltreider's (1987) studies could be attributed to the way in which subjects participated in the studies. Yu and Kaltreider (1987) mailed their questionnaire out and nurses voluntarily responded. In contrast, Colling's (1989) study was done as a part of a larger study focusing on an intervention to improve urinary incontinence.

Nurses working in nursing homes may feel compelled to respond positively. Given the prevalence of urinary incontinence in nursing homes, nurses may underreport their feelings toward urinary incontinence. Thus, social desirability may have been reflected in the responses.

A social desirability scale will be added to this study to investigate if it plays a role in nurses attitudes toward urinary incontinence.

Statement of the Problem

Urinary incontinence is a significant problem for patients in nursing homes and presents many challenges to nursing staff. Nurses' attitudes and knowledge may impact their behaviors in working with patients. According to Seltzer and Atchley (1971) "what we think about a person influences how we will perceive him, and how we perceive him influences how we will behave toward him." If you continue the logic of their statement, it would seem that

nursing care provided to patients with urinary incontinence is influenced by nurses' attitudes and beliefs.

There is a large amount of literature focusing on various aspects of urinary incontinence. Only three studies (Tarrier & Larner 1983, Yu & Kaltreider, 1987, and Colling et al., 1989), however, have addressed the attitudes of nurses working with incontinent patients in nursing homes. In addition to attitudes, only Colling's et al., (1989) study examined nursing staff's knowledge of urinary incontinence and their performance in carrying out a toileting program.

This study will replicate that portion of Colling's et al., (1989) study which evaluated the nurses' knowledge and attitudes toward urinary incontinence. In addition, it will identify if there are any differences in responses between RNs, LPNs and the nurses aides with respect to these issues. A comparison of the results from this study with Colling's study on attitudes will be done. Colling's et al., (1989) study, however, did not address the issue of social desirability; therefore, the dimension of a social desirability response set will be added to this study to determine if nurses respond in a manner that is perceived socially correct, or how they truly feel.

If the attitude scale does not provide variability as demonstrated by the frequency distribution, then it may not be useful to investigate relationships between knowledge and attitudes. However, if the responses on the Marlowe-Crowne social desirability scale demonstrate the bias of social desirability, the following relationships can be examined:

Is there variability in the attitude scale? If yes, then questions I -IV will be examined.

Research Question I

Is there a relationship between social desirability scores and attitude scores?

Research Question II

What is the relationship between social desirability and knowledge?

Research Question III

What is the relationship between social desirability and educational level, (RN vs LPN vs aide)?

Research Question IV

What is the relationship between personal characteristics of nursing staff, other than educational level, and their attitudes toward urinary incontinence?

Questions V - VIII will all be examined.

Research Question V

Are there differences between RN's, LPN's and aide's attitudes toward urinary incontinence?

Research Question VI

What is the relationship between an individual's knowledge and their attitude toward urinary incontinence?

Research Question VII

How does the knowledge data from staff in this study compare with the staff data from Colling's study?

Research Question VIII

How does the attitude data of nursing staff in this study compare with the nursing staff data from Colling's et al., (1989) study?

CHAPTER II

METHODS

Design

This study is a partial replication of Colling's (1989) study on patterned urge-response toileting (PURT) for incontinence. In that study, she utilized the Incontinence Stress Questionnaire - Staff Reaction (ISQ-SR) survey developed by Yu and Kaltreider (1987) to measure nursing staff's attitudes toward incontinence. The relationship of staff's age, educational level, knowledge of urinary incontinence care, and geriatric experience to their attitudes was also examined. These variables were evaluated in this study as well.

Setting and Sample

The study was conducted at a 120 bed Veterans Affairs nursing home which is limited to persons who are veterans. The facility has a total of 73 nursing staff: 35 registered nurses (RN), 16 licensed practical nurses (LPN), 17 nursing assistants (NA), and 5 student nurse technicians (SNT) who provide bedside care. All full and part-time nursing staff presently working at the facility were included in the study.

Instruments

Knowledge Test (Appendix B)

The knowledge test was developed by Colling (1989) in the PURT project. It consists of thirty questions that evaluate staff's knowledge of urinary incontinence. The range of possible scores is 0 (all questions wrong) to 30 (all questions correct). The test was designed with input from incontinence experts and pre-tested on nurses not involved in her study. Knowledge of urinary incontinence was tested in the following areas: anatomy and function of the urinary tract, causes and types of urinary incontinence, and how incontinence is

managed by caregivers. Colling reported that standardized Cronbach's alpha coefficients ranged from .78 to .90 (Colling, 1989).

Incontinence Stress Questionnaire - Staff Reaction (Appendix C)

The attitude scale used in this study is the ISQ-SR. It is a thirty item likert scale developed by Yu and Kaltreider (1987) designed to measure the psychological stress experienced by nursing home staff toward urinary incontinence. Attitudes toward incontinence are defined as how the staff feel about residents who are incontinent, and their reaction to incontinence itself. After the development of the scale, it was tested on 156 nursing home staff and a Cronbach's alpha coefficient of .84 was achieved. Colling's PURT study utilized a twenty-seven item version of the ISQ-SR on recommendation of the author, and achieved an alpha of .90. This study also utilized the the twenty-seven item scale.

Personal Data Sheet (Appendix D)

A personal data sheet that included the subject's age, sex, marital status, basic educational background, highest level of nursing degree achieved, present position in the nursing home, and the length of long-term care experience was completed by each participant.

Marlowe-Crowne Social Desirability Scale (Appendix E)

The Marlowe-Crowne Social Desirability Scale (M-C SDS) was used to assist in data interpretation to determine if staff are responding to questions in a socially desirable manner. The range of possible scores is 0 to 13. The higher the score the higher the response set bias. The original Marlowe-Crowne desirability scale was a thirty-three item true/false scale developed in 1960. Reynolds (1982) took the original scale and designed various short-form scales.

One of these scales, the M-C Form C, was utilized in this study. Analysis of the scale reported a .76 Kuder-Richardson reliability coefficient.

Procedures

The investigator attended staff meetings at the facility informing the nurses about the study. They received a packet to complete within two weeks. The surveys were placed in an envelope with the employee's name on the outside that was discarded when it was returned. A cover letter was enclosed which stated the purpose of the study and that their participation was completely voluntary. (Appendix A) The letter asked respondents not to discuss the study with other staff until all respondents had completed and returned their packet.

After the staff meetings, the author posted the questionnaires in a prominent place on a bulletin board close to the nurses station. Each packet included the cover letter (Appendix A), the knowledge test (Appendix B), the ISQ-SR survey (Appendix C), personal data sheet (Appendix D) , the Marlowe-Crowne Social Desirability Scale (Appendix E), and a pre-addressed return envelope.

A collection box was left at each nurse's station for staff to return completed questionnaires. This method was chosen so that participants could decide about participation without the investigator's presence. In addition, it allowed respondents time to complete the survey rather than choosing not to participate because they did not have enough time.

Two weeks after the initial questionnaires were distributed, a reminder was sent, thanking those who participated and inviting those who had not yet completed their questionnaires to do so.

Human Subjects

There was no identifying information on the questionnaires and participation was voluntary. The response to the questionnaire was deemed to

constitute informed consent to participate. The data from the questionnaires were kept in a separate locked drawer. Upon completion of the study, the information was destroyed. Approval for the study was sought through the research department at the Oregon Health Sciences University (OHSU), the VA Medical Center and the Nursing Home Care Unit.

Data Analysis

Data were entered and verified on CRUNCH which is a computer program that performs statistical analysis and manipulates data.

Research question one evaluated the relationship between social desirability scores and attitude scores using a Pearson's product-moment correlation.

To answer research question two, a Pearson's product-moment correlation was computed. Question two evaluated the relationship between the knowledge level of staff and their response on their social desirability scale. Research question three also utilized a Pearson's correlation to determine if there was a relationship between social desirability and the educational level of staff (RN vs LPN vs aides).

To answer research question four, a Pearson's product-moment correlation was computed to determine if there was a relationship between an individual's level of experience with geriatric patients and attitudes toward urinary incontinence.

Research question five evaluated the differences among RNs, LPNs, and aides attitudes toward urinary incontinence. Descriptive statistics such as means and standard deviations were computed.

Research question six evaluated the relationship between an individual's knowledge and their attitude toward urinary incontinence utilizing a Pearson's product-moment correlation.

Research questions seven and eight compared the data from this study to the data from Colling's (1989). The t-test was used to compare the two groups on knowledge and attitude.

Table 1

Summary of Instruments and Data Analysis

<u>Question</u>	<u>Instrument</u>	<u>Data Analysis</u>
1	Marlowe-Crowne SDS ISQ-SR	Pearson's r
2	Marlowe-Crowne SDS Knowledge Test	Pearson's r
3	Marlowe-Crowne SDS Personal Data Sheet	Pearson's r
4	Personal Data Sheet ISQ-SR	Pearson's r
5	ISQ-SR	T-test
6	Knowledge Test ISQ-SR	Pearson's r
7	Knowledge Test	T-test
8	ISQ-SR	T-test

CHAPTER III

Results

Description of Subjects

The subjects were from the 71 member nursing staff of a 120-bed skilled Veterans Affairs nursing home in Vancouver, Washington. Of the 71 questionnaires distributed, 39 were completed and returned for a 55% return rate. Of the three groups (RNs, LPNs, aides), RNs had the highest return (69%), followed by LPNs (56%) and aides (38%). The sample was primarily female (87%). Half of the sample was married (53%), with the remaining 46% being unmarried (single, divorced or widowed). Three (8%) of the sample had a high school education. Thirteen (33%) of the sample had completed community college and the same percent had completed college or graduate school. A slightly smaller number, 8 (21%) had completed a diploma program. Of the 24 RNs who returned the questionnaire, almost half of the sample 11 (48%) have associate degrees. Of the remaining sample, 11 (26%) have a diploma in nursing, 4 (17%) have baccalaureate degrees and 2 (9%) hold a masters degree. See Table 2 for a more complete description of the personal characteristics of the nursing home staff who returned the questionnaire.

Table 2 also contains the employment characteristics of the nursing home staff who completed the questionnaire. When the employment characteristics were examined, the majority of the staff (62%) were RNs in contrast to LPNs (23%) and aides (15%). This is an unusual distribution for nursing home staff as there is normally a higher ratio of nonlicensed staff to licensed staff. Employment in a nursing home ranged from 1-25 years with a mean of 6.4 years. The years of staff's geriatric experience ranged from 1-30 years with a mean of 11 years. Both the RNs and the LPNs averaged 5 years of nursing home experience while the aide group averaged 13 years.

Table 2

Personal Characteristics of Nursing Home Staff (N = 39)*

	RN n = 24	LPN n = 9	Aide n = 6	Total n = 39
Gender				
female	22	8	4	34
male	1	1	2	4
Marital status				
single	1	1	2	4
married	14	4	2	20
divorced	9	2	2	13
widowed		1		1
missing data		1		1
Educational level				
high school			3	3
community college	5	6	2	13
hospital school	6	2		8
college/graduate school	12	1	1	14
missing data	1			1
RNs: Highest degree				
associate diploma	11	NA	NA	
baccalaureate	6			
masters	4			
missing data	2			
missing data	1			
Age				
20 - 29	1	1		2
30 -39	6	3	2	11
40 - 49	8	3	1	12
50 - 59	8	1	2	11
60+	1	1	1	3
Years in a nursing home				
M	5.3	5.1	13.0	
Md	5.0	6.0	11.5	
SD	4.0	2.6	8.8	
range	1 - 20	1 - 10	4 - 25	
Years in geriatrics				
M	11.0	8.4	14.8	
Md	9.0	7.0	15.5	
SD	8.0	5.3	7.7	
range	1 - 30	3 - 19	5 - 25	

*n = 39 except for variables which have missing data.

Descriptive Findings on Major Variables

Knowledge Test

Scores on the knowledge test in the current study ranged from 19 to 29 with a mean score of 24.3 and a standard deviation of 2.7. RNs, LPNs, and aides differed slightly in their scores as seen in Table 3. While the scores were slightly different, there were some questions that were missed consistently across educational levels as shown in Table 4. Question 2 related to the normal changes of aging and a large percentage of subjects missed this question. Questions 20 and 23 related to the types of urinary incontinence. Finally, questions 28, 29 and 30 asked questions regarding interventions that might improve urinary incontinence. It seems consistent that if the nurses did not have an understanding of the different types of urinary incontinence, they would not select the appropriate treatment.

Table 3

Mean Scores of Knowledge Test and ISQ-SR (attitude scale)

	RN n = 24	LPN n = 9	Aide n = 6
Knowledge			
M	25.2	23.2	23.5
Md	25.5	24.0	23.0
SD	2.7	2.1	1.2
range	19 - 29	19 - 26	22 - 25
Attitudes			
M	112.2	109.3	111.2
Md	113.0	110.0	111.0
SD	5.7	6.4	6.2
range	103 - 128	97 - 119	104 - 122

Table 4

Percent of Wrong Answers on Knowledge Test By Educational Level

	RN n = 24	LPN n = 9	Aide n = 6
Question			
2	9 (39%)	6 (67%)	5 (100%)
13	14 (61%)	6 (67%)	5 (84%)
14	12 (52%)	5 (63%)	3 (50%)
20	11 (48%)	4 (45%)	3 (60%)
23	2 (8%)	2 (22%)	2 (33%)
28	18 (78%)	7 (78%)	5 (84%)
29	12 (52%)	5 (63%)	3 (60%)
30	3 (13%)	4 (44%)	2 (33%)

Attitude toward urinary incontinence (ISQ-SR)

The ISQ-SR has a possible range of 27 (the most negative) to 135 (the most positive). In this study, scores on the ISQ-SR ranged from 97 to 128 with a mean of 111 and a standard deviation of 6. Scores varied slightly across educational levels as shown in Table 3. No statistical significance was found among the three groups. Table 5 demonstrates the negative responses from the survey and Table 6 demonstrates the positive responses from the survey.

Table 5

Frequencies of Negative Responses on the ISQ-SR (n = 42)

	All	Most	Half	Some	None
Irritable	0 (0%)	1 (2%)	1 (2%)	25 (60%)	15 (36%)
Frustrated	0 (0%)	2 (5%)	7 (17%)	25 (60%)	8 (19%)
Depressed	0 (0%)	1 (2%)	6 (14%)	12 (29%)	23 (55%)
Discouraged	0 (0%)	3 (7%)	6 (14%)	27 (67%)	6 (14%)
Upset	0 (0%)	1 (2%)	3 (7%)	25 (60%)	13 (31%)
Tired	0 (0%)	4 (10%)	5 (12%)	29 (69%)	4 (10%)
Resigning	0 (0%)	0 (0%)	2 (5%)	10 (24%)	30 (71%)
Angry	0 (0%)	0 (0%)	0 (0%)	18 (44%)	23 (56%)
Guilty	1 (2%)	3 (7%)	2 (5%)	13 (31%)	23 (55%)

Table 6

Frequencies of Positive Responses on the ISQ-SR (n = 42)

	All	Most	Half	Some	None
Respect	23 (55%)	17 (41%)	2 (5%)	0 (0%)	0 (0%)
Treat/Adults	18 (42%)	22 (52%)	2 (5%)	0 (0%)	0 (0%)
Positively	16 (38%)	23 (55%)	2 (5%)	1 (2%)	0 (0%)
Ways to help	10 (24%)	22 (52%)	9 (21%)	1 (2%)	0 (0%)
Comfortable	18 (42%)	16 (34%)	1 (2%)	4 (10%)	3 (7%)

As Tables 5 and 6 show, staff responded positively to the attitude scale. The most negative response came from only 22% who felt frustrated by urinary incontinence. Twenty-one percent of the staff felt discouraged when working with incontinent patients. The largest percentage of respondents fell into the "some of the time" category. Almost seventy percent felt tired when working with incontinent patients. The frequencies found in this study are similar to those reported by Colling (1989) with the majority of the responses in the two most positive categories.

In Yu and Kaltreider's study, 45% disliked changing wet beds as opposed to 16% in Colling's study. This study found only 19% of the staff disliked changing wet beds. Yu's study reported 80% of staff who sometimes disliked the odor where Colling reported only 32% disliking the odor. Eighty-one percent of the staff in this study reported disliking odor at least some of the time with 41% of the staff disliking the odor at least half of the time. Some of the discrepancy between the two studies may come from reporting results in different categories. For example, Colling may identify only those staff who report half of the time or more frequent and Yu may identify those staff who report some of the time and more frequent.

Other notable items from this instrument in this study are that 45% of the staff reported liking to work with incontinent patients only some of the time or none of the time. In addition, 40% liked working in a nursing home only half or some of the time because of incontinent patients. In contrast, 89% of the staff liked working with old patients because of urinary incontinence.

Social Desirability (Marlowe-Crowne M-C SDS)

The social desirability scale has a possible range from 0 to 13. The higher the score the more likely an individual is responding in a socially desirable manner. All three groups fell within the middle range of the scale. Three (8%) of the sample did not complete this portion of the questionnaire. The frequencies for the social desirability scores can be found in Table 7.

Table 7

Social Desirability Scores By Educational Level

	RN n = 22	LPN n = 8	Aide n = 6
M	6.2	6.5	6.8
Md	6.5	6.5	7.0
SD	3.9	2.8	2.5
range	1 - 12	1 - 10	1 - 12

In seven of the thirteen item scale, respondents were fairly evenly distributed between true and false answers. Two of the items showed the largest spread of answers. The first was item eight, "I sometimes try to get even rather than forgive and forget." Eighty-four percent responded true. The second was item ten, "I have never been irked when people expressed ideas very different from my own." Ninety percent of the subjects responded true.

It is unclear why this scale had a high percentage of missing data. Possible explanations for the missing data are: it was the last scale at the end of a fairly long survey and people either chose not to complete it or simply did not see it; several of the scales had words such as "never" and "always" underlined with comments put at the side and subjects may not have felt comfortable

responding to such questions; it was very different from the previous scales that dealt specifically with incontinence and respondents may have chosen not to complete it if they ran short on time. Missing data were not computed into the calculated scores.

There was adequate variability in the attitude scale with a range of scores from 97 to 128 so the following questions were asked:

Research Question 1

Is there a relationship between social desirability scores and attitude scores?

To answer this question, a Pearson's product-moment correlation was computed to examine the relationship between social desirability and attitude scores. There was a statistically significant correlation between social desirability and attitude ($r = .33$, $p = .04$). Given the modest size of the correlation, it is probable that social desirability played a role, but does not skew the data to such a degree that it is not useful to evaluate attitude scores further. However, since the scores on the attitudes scale were in the two most positive categories and there was a statistical relationship found between social desirability and attitude, social desirability should be considered as a threat to the validity of the attitude scale.

Research Question 2

What is the relationship between social desirability and knowledge about incontinence?

To answer this question, a Pearson's product-moment correlation was computed to examine the relationship between social desirability and knowledge. Again, there was a statistically significant correlation between the two variables;

however, it was an inverse relationship ($r = -.36$, $p = .03$). This would indicate that the higher the knowledge score, the lower the social desirability score.

Research Question 3

What is the relationship between social desirability and educational level, (RN vs LPN vs aide)? A Pearson's product-moment correlation was computed and found no statistical significance between educational level and social desirability ($r = .08$, $p = .63$).

Research Question 4

What is the relationship between personal characteristics of nursing staff, other than educational level, and their attitudes toward urinary incontinence? Correlations were computed and showed no significant relationship for the following variables: how long the nurse worked in a nursing home ($r = .01$, $p = .96$), how long the nurse worked with geriatric patients ($r = .08$, $p = .63$), and age ($r = -.01$, $p = .93$).

Research Question 5

Are there differences between RN's, LPN's and aide's attitudes toward urinary incontinence? Table 3 shows the means and standard deviations for the three groups. A t-test was computed to determine if there were significant differences among the three groups. Table 8 displays the results of these t-tests. There are no statistically significant findings among the three groups in relation to their scores on the attitude scale. Thus, nursing staffs' educational preparation did not affect their attitude toward urinary incontinence.

Table 8

T-tests Between Groups on the Attitude Scale

	t-test	p value
RN / Aides	-0.43	0.68
RN / LPN	-0.75	0.46
LPN / aides	0.15	0.88

Research Question 6

What is the relationship between an individual's knowledge and their attitude toward urinary incontinence?

To answer this research question, a Pearson's product-moment correlation was computed. There was no statistical significance found between knowledge and attitudes ($r = .021$, $p = .89$).

Research Question 7

How does the knowledge data from staff in this study compare with the staff data from Colling's (1989) study?

To answer this question, a t-test was computed. There was a statistically significant difference between the two groups for both knowledge and attitudes. This can be seen in table 9.

The mean for Colling's (1989) group was 19.9 and for this study it was 24.3. One possible explanation could be the high number of aide staff in comparison to RN staff, yet education does not seem to play a factor in knowledge scores.

Table 9
T-tests of Knowledge and Attitude Scores

	Colling (1989) n = 308		Mead (1991) n = 42		t-test	p value
	M	SD	M	SD		
Knowledge	19.9	5.0	24.33	2.7	-8.90	0.0
RN	21.8	4.7	25.2	2.7	-3.83	0.0
LPN	18.9	5.2	23.2	2.1	-3.49	0.0
aide	19.7	4.9	23.5	1.2	-6.30	0.0
Attitude	108.8	9.9	111.0	6.0	-2.01	0.05
RN	108.5	9.0	112.2	5.7	-0.79	0.04
LPN	107.0	8.6	109.3	6.4	-0.88	0.39
aide	109.1	10.2	111.2	6.2	-0.79	0.46

Research Question 8

How does the attitude data of nursing staff in this study compare with the nursing staff data from Colling's (1989) study?

To answer this question, a t-test was computed between the two groups. A statistically significant difference was found between the groups ($t = -2.01$, $p = .05$). The mean for Colling's (1989) group was 108.8 and the mean for this study was 111.0 (Table 9). Although the means are statistically significant, the numeric difference is quite small, 108.8 versus 111. It is difficult to make any conclusions about the two groups based on the small numeric difference between the means. The clinical significance of this finding is that both groups scores fell into the two most positive categories of the attitude scale.

CHAPTER IV

Summary, Conclusion, and Recommendations

This study was a partial replication of Colling's (1989) study on urinary incontinence in nursing homes. The purpose of this study was to evaluate nurses' attitudes and knowledge toward urinary incontinence to determine if educational level and social desirability play a role in the way nurses respond to urinary incontinence. In addition, data from this study was compared to data from Colling's (1989) study.

This sample was drawn from a 120 bed Veterans Affairs nursing home. All 71 nursing staff were invited to participate. They were asked to complete a questionnaire that was placed in their employee mailbox. A 30 item knowledge test, a 30 item attitude scale and a 13 item social desirability scale were included in the questionnaire. A separate envelope was included for staff to return their questionnaires to a collection box placed in a prominent location at the nurses station. Seventy-one questionnaires were distributed; 39 were completed and returned (55% response rate). Additional information regarding the subjects' demographic data were also collected.

Eight research questions were formulated. The first three questions concerned social desirability in relation to attitude scores, knowledge scores and educational level. To answer the first three questions, Pearson's product-moment correlations were computed. Questions one and two found statistical significance between social desirability and attitudes, and social desirability and knowledge. The correlations however were low and did not provide convincing evidence that would preclude evaluating the attitude and knowledge scores. However, given the statistical significance between attitudes and social desirability, and the overwhelmingly positive response to the attitude scale, social desirability should be considered as a threat to the validity of the attitude scale.

Question three asked: what is the relationship between social desirability and educational level? This correlation revealed no statistical significance among the RN, LPN and aide staff. Initially, education would seem to play a role. Possibly the more educated an individual, the less likely she would be to respond in a socially desirable manner. However, the social desirability literature does not provide any information on whether higher education diminishes the tendency to have a response set bias.

The results of this study suggest that social desirability does play a role in attitudes toward urinary incontinence and should be considered as a response set bias. A social desirability scale should be used in future studies that evaluate nurses' attitudes toward urinary incontinence in order to sort out the effect of response set biases.

Question four evaluated the relationship between personal characteristics of nursing staff, other than educational level, and their attitudes toward urinary incontinence. Correlations demonstrated no relationship between attitudes toward urinary incontinence and the following variables: length of time working in the nursing home, length of time the nurse worked with geriatric patients, and age.

Question five examined whether there were differences among RN's, LPN's and aide's attitudes toward urinary incontinence. T-Tests were computed and revealed no significant differences among the groups. Studies evaluating the attitudes of nurses toward elderly patients have produced varied results. Brower (1985) found a strong correlation between the nurses educational level and their positive attitudes towards the elderly. Gillis (1973) and Smith et al., (1982) found similar results. In general, both studies found that registered nurses held more positive attitudes than licensed practical nurses and nursing

assistants. Given the continued mixed results of various studies, it is useful to assess the general attitudes toward the elderly of the various levels of nurses.

Question six examined the relationship between attitude and knowledge. A Pearson's correlation did not reveal a significant relationship between these two variables. While no relationship was found between attitude and knowledge, it is perhaps naive to think that positive attitudes and high knowledge scores would result in positive behavioral approaches to incontinence. The element that is missing could be the nursing staff's willingness to change their behavior.

The last two questions compared knowledge and attitude data from Colling's (1989) study with the current study utilizing a t-test. Statistically significant differences were found between the two groups. The major difference between the groups was that Colling had a much higher number of aide staff. However, on further analysis, educational level did not account for the differences between the two groups. Thus while significant differences were demonstrated, the findings are unclear, meaning some question remains on what effect education may have on attitudes.

In an article that was published after this study was completed, Yu et al. (1991) did a follow-up study to the original 1987 pilot study. They completed a factor analysis and dropped any items that seemed repetitive or contained too many underlying dimensions. Based on the factor analysis, she reduced her scale to twenty items that fell into three categories: positive reactions, negative reactions and aesthetic reactions.

For the first time, Yu et al., (1991) published actual numbers and percentages from the questionnaire. Yu et al., (1991) had a sample of 291 nurses which was considerably larger than the 39 subjects in this study; however, when the items are compared, the percentages are very similar to those reported in Tables 5 and 6. For example, Yu et al., (1991) report staff feeling negative

reactions at least some of the time when caring for incontinent patients: frustrated (63%), tired (61%) discouraged and irritable (55%), depressed with their work (38%), guilty about their feelings (30%), and angry (42%). In the current study, the following percentages were found: frustrated (60%), tired (69%), discouraged (67%), irritable (60%), depressed with their work (29%), guilty about their feelings (31%), and angry (44%). The percentages between the two groups are quite similar.

Based on her findings, Yu et al., (1991) makes the conclusion that nursing home staff experience stress when working with incontinent patients. She also reports that if a situation is creating a stressful atmosphere for individuals, then it must either be stopped or reversed to achieve objectives and to fulfill needs. While the information generated from their questionnaires is quite interesting, the majority of all respondents fall into "some of the time" or "none of the time," which are the two most positive categories. It seems that Yu et al. (1991) make conclusions that go beyond what the data would suggest.

There can be valuable information learned from the tool. It could potentially target areas where nursing staff are dissatisfied with their work and allow administrators to focus educational offerings. In addition, administrators need to inquire from staff about possible solutions that would correct the problem and involve them in the decision making process. However, when 90% of a questionnaire's responses are in the two most positive categories, as was found in Yu et al., (1991), Colling (1989) and Mead (1991), the conclusions should consider the overall positive response to the questionnaire.

In the introduction, it was mentioned that in a survey of over 2,000 registered nurses, only 7.3% felt urinary incontinence was an important clinical issue. This is in contrast to the prevalence of the problem in nursing homes. In addition, with the growing elderly population, urinary incontinence will only

become a bigger issue. In some sense it is concerning that nurses view incontinence in such a positive manner. It appears that nurses are content managing the incontinence rather than being concerned about it and taking an active role in the treatment of incontinence. If nurses do not see urinary incontinence as a problem, then there will be minimal motivation for a change in current behaviors. Nurses need to identify that incontinence is a clinical problem and want to identify methods to improve treatment before the problem of urinary incontinence in nursing homes will improve. Another consideration is that the attitude scale may not measure nurses' true reactions toward urinary incontinence.

Conclusions that can be made as a result of this research are limited. Veterans Affairs (VA) nursing homes have a narrow patient population. The residents must have served in the military and are primarily male. The majority of residents in community nursing homes tend to be female. It is unclear at this point if the gender of the residents played a role in this study. There is very little research that would indicate if it is easier or more difficult to care for incontinent males versus incontinent females.

Incontinence is an important aspect of care that nurses must deal with particularly in nursing homes. This study found that there was a knowledge deficit among the nursing home staff. They did not know the different types of urinary incontinence, nor were they able to accurately identify the appropriate treatment. Behaviors used by nursing staff may be limited by their knowledge deficit. They are currently managing urinary incontinence within their scope of knowledge. Although not a part of this study, it can be speculated that correcting the knowledge deficit may lead to a change in behavior. It is not possible to infer that conclusion from the data in this study.

One of the primary implications from this study is to base education for the VA nursing staff on the knowledge test results. Two major areas that subjects missed were questions on the type of urinary incontinence and interventions that might improve urinary incontinence. In a broader perspective, schools of nursing should evaluate their curricula on incontinence. Not only should types of incontinence be addressed but interventions and treatments as well.

Additional implications from this study concern social desirability. This study found that nurses gave somewhat biased answers. Nurses do not believe that much can be done about incontinence, yet they want to give "right" answers. Further research in the area of social desirability and the role that it plays in the assessment of attitudes toward urinary incontinence needs to be done.

Finally, nursing home administrators need to identify variables associated with incontinent patients that create negative feelings, whether through the ISQ-SR or another attitude scale, and identify what can be done to intervene in the process of negative attitude formation toward urinary incontinence.

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Appendix A
Cover Letter

Appendix A

Cover Letter

Date: May 8, 1991

Dear Colleague:

You have been asked to participate in a study conducted by Mary Jo Mead, RN, under the supervision of Joyce Colling, RN, PhD, thesis advisor. This study is part of a masters research project at the Oregon Health Sciences University and your help is greatly appreciated.

The study is completely anonymous and your responses can never be personally connected with you in any way. Please do not put your name on the questionnaire. All data forms will be kept confidential and will be destroyed when the project is completed. Because individuals are not identified with specific answers, reported material cannot identify any individuals.

Please do not discuss your responses with anyone until the study is completed. Your cooperation is completely voluntary. If you choose to participate, please take the time to complete all parts of the questionnaire and place the packet in the box at each nurses' station. The questionnaire contains four segments for you to complete. It is estimated it will take 20 - 30 minutes to complete.

Your response to the questionnaire is your consent to participate. Although there is no immediate benefit to you from the questionnaire, it is hoped that information learned from this study will allow long-term benefit to patients with urinary incontinence. Upon completion of the study, the findings will be made available to you through your Unit Supervisor.

Thank you for your cooperation.

Mary Jo Mead

Appendix B
Knowledge Test

Appendix B

Staff Knowledge Test

PLEASE CIRCLE THE LETTER THAT IDENTIFIES THE SINGLE CORRECT ANSWER FOR THE FOLLOWING QUESTIONS.

1. WHICH OF THE FOLLOWING DESCRIBES URINARY INCONTINENCE:
 - a. individual has control over loss of urine
 - b. occurs "once in a blue moon"
 - c. involuntary (no control)
 - d. insufficient amount to be of concern

2. NORMAL AGING CHANGES WOULD BE CHARACTERIZED BY:
 - a. a decreased bladder capacity
 - b. having a longer time span between the sensation to urinate and needing to void
 - c. the development of urinary incontinence
 - d. all of the above

3. URINARY INCONTINENCE MAY AFFECT:
 - a. the way an individual feels about themselves
 - b. an individual's willingness to socialize
 - c. an individual's interactions with their caregivers
 - d. all of the above

4. URINARY INCONTINENCE MIGHT RESULT IN:
 - a. the development of less skin irritation
 - b. an increase in urinary tract infections
 - c. a decrease in skin rashes
 - d. a safer environment

5. WHICH ONE OF THE FOLLOWING DESCRIBES THE IMPACT OF URINARY INCONTINENCE UPON THE NURSING HOME STAFF?
 - a. decreased stress
 - b. increased workload
 - c. lack of frustration
 - d. increased morale

6. THE PROBLEM OF URINARY INCONTINENCE CAN HAVE AN IMPACT UPON:
 - a. the individual
 - b. the family
 - c. the caregivers
 - d. all of the above

7. URINARY INCONTINENCE:
 - a. is more common in the elderly
 - b. is a normal part of growing older
 - c. is an unavoidable consequence of aging
 - d. all of the above

8. THE ORGAN(S) INVOLVED IN THE STORAGE AND EMPTYING OF URINE IS THE:
- kidneys
 - spinal column
 - bladder
 - ureter
9. THE ABILITY TO REMAIN CONTINENT MAY BE AFFECTED BY:
- an individual's mobility
 - an individual's ability to express their needs
 - the staff's awareness of an individual's need
 - all of the above
10. URINARY INCONTINENCE MIGHT RESULT FROM A PROBLEM OR DISEASE ASSOCIATED WITH:
- the lower urinary tract
 - the brain
 - the spinal column
 - all of the above
11. A PROBLEM WHICH MIGHT BE ASSOCIATED WITH URINARY INCONTINENCE IS:
- immobility
 - increased "gas"
 - upset stomach
 - diminished hearing
12. URINARY INCONTINENCE:
- appears to have an increased risk of occurring in the elderly
 - is a normal part of growing old
 - is not caused by certain problems or diseases
 - is eventually seen in all elderly persons
13. A COMMON TYPE OF URINARY INCONTINENCE SEEN IN THE ELDERLY NURSING HOME POPULATION IS:
- stress incontinence
 - urge incontinence
 - overflow incontinence
 - acute incontinence
14. ORDINARILY, ONCE AN INDIVIDUAL GETS THE URGE TO URINATE:
- they must empty their bladder immediately
 - they have no control over what happens
 - their nervous system signals their bladder to relax and continue to fill
 - all of the above
15. URINARY INCONTINENCE:
- is the same for all elderly individuals
 - can involve many different causes
 - is the result of getting old
 - can always be cured

16. WHEN AN ELDERLY INDIVIDUAL GETS THE URGE TO URINATE, HE OR SHE:
- may need to urinate immediately or within a few minutes
 - can usually delay the need to urinate for an hour or more
 - has already urinated
 - the urge has nothing to do with urinating
17. EMPTYING ONE'S BLADDER CAN BE AFFECTED BY:
- an enlarged prostate
 - a problem in the muscles that control the opening of the bladder
 - a problem affecting the bladder's ability to contract or squeeze down
 - all of the above
18. THE TREATMENT OF URINARY INCONTINENCE:
- should be based upon the type of incontinence
 - should be individualized
 - should be followed by all staff members
 - all of the above
19. FUNCTIONAL INCONTINENCE:
- is caused by "bladder problems"
 - is never seen in the elderly
 - is common among elderly nursing home residents
 - is often seen in adolescents
20. THE TYPE OF INCONTINENCE OFTEN SEEN IN ELDERLY MEN AND CAUSED BY AN "ENLARGED PROSTATE" IS CALLED:
- acute incontinence
 - overflow incontinence
 - functional incontinence
 - stress incontinence
21. THE INABILITY TO DELAY URINATING ONCE YOU FEEL THE SENSATION IS CALLED:
- stress incontinence
 - overflow incontinence
 - urge incontinence
 - functional incontinence
22. STRESS INCONTINENCE:
- is caused by job stress
 - is most often seen in women who have multiple children
 - is never seen in elderly individuals
 - is never seen in men
23. A TEMPORARY TYPE OF INCONTINENCE THAT MIGHT BE CAUSED BY AN INFECTION IS CALLED:
- acute incontinence
 - stress incontinence
 - urge incontinence
 - overflow incontinence

24. THE COST OF CARING FOR INDIVIDUALS WITH URINARY INCONTINENCE:
- a. has a slight impact on nursing homes
 - b. is of no concern
 - c. amounts to about .5 to 1.5 billion dollars per year
 - d. all of the above
25. SELECT THE APPROACH THAT WOULD BE BEST IN CARING FOR AN INCONTINENT RESIDENT:
- a. "That's o.k., I'm here to clean you up."
 - b. "I've just had you on the toilet for the fourth time and now you're wet."
 - c. "Don't worry, I'll have you cleaned up in a jiffy."
 - d. "I'm sorry I didn't get here in time to get you to the toilet."
26. THE NURSING STAFFS' INTERACTION WITH AN INCONTINENT RESIDENT MAY UNINTENTIONALLY:
- a. encourage incontinence
 - b. suggest the resident shouldn't be concerned
 - c. lead to increased dependency
 - d. all of the above
27. WHICH OF THE FOLLOWING STATEMENTS ENCOURAGES INCONTINENCE?
- a. "I'm sure you're embarrassed about this."
 - b. "What do you think we might do to keep this from happening again?"
 - c. "Oh, don't worry about it, that's what I'm here for."
 - d. "I'll try to get here quicker so it won't happen again."
28. WHICH OF THE FOLLOWING APPROACHES ENCOURAGES CONTINENCE AMONG RESIDENTS?
- a. praise for remaining dry.
 - b. praise for unsuccessful attempts
 - c. praise for letting staff know when they're wet
 - d. all of the above
29. TIMED TOILETING PROGRAMS ARE BEST FOR RESIDENTS EXPERIENCING:
- a. stress and functional incontinence
 - b. functional and urge incontinence
 - c. urge and overflow incontinence
 - d. overflow stress incontinence
30. IN ORDER FOR A TOILETING PROGRAM TO BE SUCCESSFUL, YOU MUST:
- a. toilet the resident every two hours
 - b. toilet the resident at individually scheduled times
 - c. change the resident as soon as they are incontinent
 - d. change the toileting schedule every day

Appendix C
Incontinence Stress Questionnaire -
Staff Reaction

Appendix C

INCONTINENCE STRESS QUESTIONNAIRE - STAFF REACTION (ISQ-SR)

Directions:

I am interested in how you generally feel about taking care of patients who are incontinent of urine.

Please use the following scale and check the number which describes **HOW YOU FEEL**. There are no right or wrong answers.

1. All of the time (always)
2. Most of the time
3. About half of the time
4. Some of the time
5. None of the time

**Remember, your answers will be kept confidential.

BECAUSE OF THEIR URINARY INCONTINENCE, WHEN I TAKE CARE OF THEM I FEEL:

	1	2	3	4	5
	All	Most	1/2	Some	None
1. Resentful	_____	_____	_____	_____	_____
2. Nauseated	_____	_____	_____	_____	_____
3. Angry	_____	_____	_____	_____	_____
4. Frustrated	_____	_____	_____	_____	_____
5. Compassionate	_____	_____	_____	_____	_____
6. Tired	_____	_____	_____	_____	_____
7. Discouraged	_____	_____	_____	_____	_____
8. Sorry for them	_____	_____	_____	_____	_____
9. Comfortable working with them	_____	_____	_____	_____	_____
10. Irritable	_____	_____	_____	_____	_____
11. Helpless	_____	_____	_____	_____	_____
12. Depressed about my work	_____	_____	_____	_____	_____
13. Guilty about my feeling	_____	_____	_____	_____	_____
14. Hopeless	_____	_____	_____	_____	_____
15. That I can help them	_____	_____	_____	_____	_____
16. Upset about the extra work	_____	_____	_____	_____	_____

ALSO BECAUSE OF THEIR INCONTINENCE, I:

	1 All	2 Most	3 1/2	4 Some	5 None
17. React negatively toward incontinent patients	_____	_____	_____	_____	_____
18. Treat them as adults	_____	_____	_____	_____	_____
19. Treat them with respect	_____	_____	_____	_____	_____
20. Ignore them by not responding	_____	_____	_____	_____	_____
21. Look for ways to help them	_____	_____	_____	_____	_____
22. Feel like resigning from my job	_____	_____	_____	_____	_____
23. Dislike changing wet beds/clothing	_____	_____	_____	_____	_____
24. Dislike the odor	_____	_____	_____	_____	_____
25. Like working with incontinent patients	_____	_____	_____	_____	_____
26. Like to work in a nursing home	_____	_____	_____	_____	_____
27. Dislike working with incontinent patients	_____	_____	_____	_____	_____
28. Like to work with elderly patients	_____	_____	_____	_____	_____
29. React positively toward elderly patients	_____	_____	_____	_____	_____
30. Avoid them	_____	_____	_____	_____	_____

Appendix D
Personal Data Sheet

Appendix D
PERSONAL DATA SHEET

Please complete all the following information.

Date ___/___/___

Sex: Male ___ Female ___

Age: 20 - 29 _____
30 - 39 _____
40 - 49 _____
50 - 59 _____
60 + _____

Marital Status (please check one)

___ Single
___ Married
___ Divorced
___ Separated
___ Widowed

Highest Level of Education (please check one)

___ High School
___ Community College/Technical School
___ Hospital school of nursing
___ College/graduate school

Present position (please check one):

___ SNT
___ NA
___ LPN
___ RN

If you are a RN, please indicate your highest degree:

___ Associate
___ Diploma
___ Baccalaureate
___ Masters

How long have you worked in a nursing home? Years _____

How long have your worked with geriatric patients? Years _____

Thank you for your cooperation.

Appendix E
Social Desirability Scale

Appendix E

Please answer the following questions True or False

- T or F 1. It is sometimes hard for me to go on with my work if I am not encouraged.
- T or F 2. I sometimes feel resentful when I don't get my way.
- T or F 3. On a few occasions, I have given up doing something because I thought too little of my ability.
- T or F 4. There have been times when I felt like rebelling against people in authority even when I knew they were right.
- T or F 5. No matter who I'm talking to, I'm always a good listener.
- T or F 6. There have been occasions when I took advantage of someone.
- T or F 7. I'm always willing to admit it even when I make a mistake.
- T or F 8. I sometimes try to get even rather than forgive and forget.
- T or F 9. I am always courteous, even to people who are disagreeable.
- T or F 10. I have never been irked when people expressed ideas very different from my own.
- T or F 11. There have been times when I was quite jealous of the good fortune of others.
- T or F 12. I am sometimes irritated by people who ask favors of me.
- T or F 13. I have never deliberately said something that hurt someone's feelings.

AN ABSTRACT OF THE MASTER'S RESEARCH PROJECT OF
MARY JO MEAD

For the MASTER OF SCIENCE

Date of Receiving this Degree: June 1992

Title: NURSING HOME NURSES' KNOWLEDGE AND ATTITUDES TOWARD
URINARY INCONTINENCE

APPROVED _____

Joyce Colling, RN, Ph.D., Thesis Advisor

The purpose of this study was to evaluate nurses' attitudes and knowledge toward urinary incontinence to determine if educational level and/or social desirability play a role in the way nurses respond to urinary incontinence. The study utilized a questionnaire format, was conducted at a Veterans Affairs nursing home and all nursing staff were invited to participate. Data from this study partially replicated Colling's (1989) study and were compared to corresponding data in her study.

Eight research questions were formulated. The first three questions concerned social desirability in relation to attitudes scores, knowledge scores and educational level. Statistical significance between social desirability and attitudes, and social desirability and knowledge was established. Most responses on the attitude scale were very positive. Given the positive responses on the attitude scale and the statistical significance between social desirability and attitudes, social desirability should be considered as a response set bias and a threat to the validity of the attitude scale. No significance was found, however, between social desirability and the nurses' educational levels of RN, LPN and aide. Neither was significance established between personal characteristics of staff and their attitude toward incontinence. In addition, no relationship was found between knowledge and attitudes.

The last two questions compared knowledge and attitude data from Colling's (1989) study with the current study. Statistically significant differences were found between the two groups. The major difference between the groups was that Colling had a much higher ratio of aide staff. However, on further analysis, educational level did not account for the differences between the two groups. While significant differences were demonstrated, the findings are unclear. That is, it would appear that something other than education effects staffs' attitudes about incontinence.

The attitude scale utilized in this study was originally developed by Yu et al. (1987). The same scale was used in Colling's (1989) study and the current study. In all three studies, the overall response toward urinary incontinence was positive. This result may be due to two factors. First, the scale may not be measuring nurses true reactions to urinary incontinence. Second, as this study points out, the issue of social desirability is a challenge to the validity of the attitude scale raising question about its usefulness.

Conclusions that can be made as a result of this research are limited. Veterans Affairs (VA) nursing homes have a unique resident population as they must have served time in the military and are primarily male. The majority of residents in community nursing homes tend to be female. It is unclear at this point if the predominantly male gender of the residents influenced the attitudes of staff in this study. There is very little research regarding whether it is easier or more difficult to care for incontinent males versus incontinent females and if this was a factor in staff attitudes toward incontinence.

While no relationship was found between knowledge and attitudes, specific knowledge deficits regarding urinary incontinence were found in the nursing home staff. They did not know the different types of urinary incontinence

nor where they are able to accurately identify the appropriate treatment options. Although it is not possible to infer from this study, it can be speculated that correcting the knowledge deficit may lead to a change in the behaviors of nurses. That is, if nursing staff know there are effective treatments for incontinence they may become more proactive rather than reactive to urinary incontinence.

It is recommended that education for the VA nursing staff should occur based on the results from the knowledge test deficits.