

The University of North Carolina at Chapel Hill  
Eshelman School of Pharmacy

**DPOP 803**  
**Social & Behavioral Aspects of Pharmaceutical Use**

**COURSE SYLLABUS**

**Spring 2009**

**COURSE CO-ORDINATORS:** Betsy L. Sleath, Ph.D.  
Pharmaceutical Outcomes and Policy  
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Office hours: Email, stop by, or call for an appointment

**TIME AND PLACE:** Wednesday – 8:30-11:00  
Beard 102

**Course Description:**

This course draws upon medical sociology and health psychology to familiarize students with core theories, research, measures, and design issues relevant to conducting social/behavioral research in pharmaceutical use.

**REQUIRED COURSE TEXTS:**

- Karen Glanz, Barbara Rimer, K Viswanath. Health behavior and health education: theory, research, and practice. Fourth Edition. San Francisco: Jossey-Bass Publishers, 2008.

**STUDENTS CAN ALSO CHOOSE TO READ ONE OF THE FOLLOWING TWO BOOKS:**

- Joseph Schneider and Peter Conrad. Having epilepsy: the experience of illness. Philadelphia: Temple University Press, 1982.
- Sue Estroff. Making it Crazy: an Ethnography of Psychiatric Clients in an American Community. Berkley: University of California Press, 1981.

ALL BOOKS ARE AVAILABLE AT THE HEALTH AFFAIRS BOOKSTORE

**IMPORTANT WEBSITES**

- Healthy People 2010 <http://www.health.gov/healthypeople/>
- The Commonwealth Fund <http://www.cmwf.org>
- Robert Wood Johnson Foundation <http://rwjf.org/index.jsp>

**ASSIGNMENTS:**

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|--|-----------|
| 1) Term paper                            | 40 points |
| 2) Article critique discussion questions | 20 points |
| 3) Book assignment think piece           | 20 points |
| 4) Class participation                   | 20 points |

**1) Term Paper/Critical Review of Literature**

You can choose any area that relates to social and behavioral aspects of pharmaceutical use and/or health behavior. You must critically review the literature in the area (theoretical frameworks, current methodologies) and discuss how the field or area could be further developed.

Papers must be 10 to 20 pages long and have a reference section. The paper must be typed, double-spaced, have page numbers, and one inch margins or they will not be accepted. If a paper is handed in late 10% will be deducted for each day the paper is late.

***Papers will be graded as follows:***

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|--|-----------|
| • Clarity/Organization<br>(Is there an introduction? is there a conclusion? does the paper flow well?) | 5 points  |
| • Content  | 25 points |
| • Spelling/Grammar/Typographical Errors  | 5 points  |
| • Use of References  | 5 points  |

**2) Article Critique Discussion Questions (20 points)**

During the semester you will be asked to lead a discussion of two articles you have been assigned to critique. For each article, a week before you are to lead the discussion you are to distribute to the class a list of discussion questions that the other students should consider when reading the article. The other students (not those leading the critique discussion) must then write their responses to your questions (either in handwriting or typewritten) and hand these in at the beginning of the class in which the article is discussed (this counts as part of the participation grade-see below).

A suggested format for your oral presentation is as follows:

- A. Provide a formal brief summary of the target article (5-10 minutes)
- B. Lead a 15-20 minute class discussion focusing on the following areas:
- critically evaluate research methods, data analysis, study results in the target article
  - critically discuss the application of the theory/model/conceptual framework in the article
  - discuss how the theory/model/conceptual framework could be further developed, and/or additional applications made, specific to health behavior research in the area of social and behavioral aspects of pharmaceutical use

***Article critique presentations will be graded as follows***

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|--|-----------|
| Discussion questions                       | 10 points |
| Presentation and leading of the discussion | 10 points |

### 3) Book Assignment Think Piece

In your think piece you are to discuss the following:

- A. What did you find most interesting about the book?
- B. What did you not like about the book?
- C. What theoretical framework was used in the book? If none, state that.
- D. What theoretical framework would you have used if you conducted the study?
- E. Would you have designed the study differently? Why or why not?

Your think piece should be roughly 6-8 pages long. The think piece must be typed, double-spaced, have page numbers and one inch margins or it will not be accepted. If a paper is handed in late, 10% will be deducted for each day the paper is late.

#### *Think Piece will be graded as follows:*

Clarity/Organization	5 points
Spelling Grammar/Typographical Errors/Length	5 points
Content (do you relate your critique to course content? is theory discussed?)	10 points

### 4) Class Participation

Attendance is required. Students are expected to attend class and participate in class discussions. Students are expected to hand in their answers to discussion questions at the start of class. Students are expected to actively participate in in-class exercises.

Students are expected to follow the **UNC Honor Code**. Evidence of cheating on exams or quizzes, plagiarism, copying of homework assignments or any other form of academic dishonesty will result in a required conference with the course director and immediate referral to the Office of the Associate Dean for Professional Education and/or the Student Attorney General for review and adjudication. If you have any questions or concerns regarding these matters, please ask us for clarification.

Students must complete all assignments to have a grade of incomplete removed from their transcript.

## CLASS SCHEDULE

### Wednesday, January 14

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**Topic:****Lecturer:** Betsy Sleath, PhD

Course Overview

What is health education and health behavior?

What is social and behavioral pharmacy?

Preventive health, illness, and sick role behavior

**Learning objectives:**

- 1) Describe the fields of health education and health behavior.
- 2) Define preventive health, illness, and sick role behavior
- 3) Describe the field of social and behavioral pharmacy.

**Assigned readings:**

Dolinsky D. Social/behavioral pharmacy in the United States-the state-of-the art. J Clin Pharm Ther. 1990 Jun; 15(3):155-63.

Glanz: Chapters One and Two

Dolinsky D. Psychosocial aspects of the illness experience. pp. 127-142 In: Wertheimer AI, Smith MC. Pharmacy practice: social and behavioral aspects. Baltimore: Williams and Wilkins, 1989.

### Wednesday, January 21

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**Topic:****Lecturer:** Betsy Sleath, PhD

Social and behavioral aspects of the use of pharmaceuticals and self care in the U.S.

Sociodemographic characteristics, health behavior, and the use of medications

**Learning objectives:**

- 1) Explain the history of and extent to which patients currently use pharmaceuticals and self care in the U.S.
- 2) Describe how socio-demographic characteristics are related to the use of pharmaceuticals.
- 3) Describe where patients receive medication information from.
- 4) Describe the need for theory when studying the social and behavioral aspects of pharmaceutical use in the U.S.

**Assigned readings:**

Svarstad B. Sociology of drugs in health care. pp. 197-211 In: Wertheimer AI, Smith MC. Pharmacy practice: social and behavioral aspects. Baltimore: Williams and Wilkins, 1989.

Skaer TL, Sclar DA, Robison LM. Trends in the prescribing of oral agents for the management of type 2 diabetes mellitus in the United States, 1990-2001: does type of insurance influence access to innovation? Diabetes Educator. 2006;32(6):940-953.

Conboy L, Patel S, Kaptchuk TJ, Gottlieb B, Eisenberg D, Acevedo-Garcia D.

Sociodemographic determinants of the utilization of specific types of complementary and alternative medicine: an analysis based on a nationally representative survey sample. Journal of Alternative and Complementary Medicine. 2005;11:977-994.

**Article to critique:**

Ortega AN, Gergen PJ, Paltiel D, Bauchner H, Belanger KD, Leaderer BP. Impact of site of care, race, and Hispanic ethnicity on medication use for childhood asthma. Pediatrics. 2002;109(1):1-6.

Gardiner P, Graham R, Legedza AT, Eisenberg D, Phillips RS. Factors associated with dietary supplement use among prescription medication users. Arch Intern Med. 2006;166:1968-1974.

**Wednesday, January 28**

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**Topic:**

Health belief model

**Lecturer:** Betsy Sleath, PhD**Learning objectives:**

- 1) Explain the health belief model.
- 2) Apply the health belief model to pharmaceutical use.

**Assigned readings:**

Glanz Chapter 3

Kelly GR, Mamom JA, Scott JE. Utility of the health belief model in examining medication compliance among psychiatric outpatients. Social Science and Medicine. 1987; 25(11):1205-11.

**Article to critique:**

Brown CM, Segal R. The effects of health and treatment perceptions on the use of prescribed medication and home remedies among African American and White American hypertensives. Social Science and Medicine. 1996; 43(6):903-917.

George J, Shalansky SJ. Predictors of refill non-adherence in patients with heart failure. Br J Clin Pharmacol. 2007;Apr 63(4):488-93.

**Wednesday, February 4**

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**Topic:**

Social networks and social support; Caregivers and medications

**Lecturer:** Betsy Sleath, PhD**Learning objectives:**

- 1) Describe how social networks and social support can influence health and medication use.
- 2) Discuss the importance of caregivers in the drug use process.

**Assigned readings:**

Glanz: Chapter 9

Ritter, C. Social supports, social networks, and health behaviors. In DS Gochman (Ed), *Health Behavior: Emerging research perspectives*. New York: Plenum Press, 1988.

Koenig HG, Westlund RE, George, LK, et al. Abbreviating the Duke Social Support Index for use in chronically ill elderly individuals. *Psychosomatics*. 1993; 34:61-9.

Lubben JE. Assessing social networks among elderly populations. *Family & Community Health*. 1988; 11(3):42-52.

Elder JP, Ayala GX, Harris S. Theories and intervention approaches to health-behavior change in primary care. *Am J Prev Med*. 1999; 17(4): 275-84.

**Articles to critique:**

Ranelli PL, Aversa SL. Medication-related stressors among family caregivers. American Journal of Hospital Pharmacy. 1994; 51(1):75-9.

Remien RH, Stirrat, Dognin J, Day E, El-Bassel N, Warne P. Moving from theory to research to practice: implementing an effective dyadic intervention to improve antiretroviral adherence for clinic patients. J Acquir Immune Defic Syndr. 2006; Dec 1; 43 Suppl 1: S69-S78.

**Wednesday, February 11**

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**Topic:**

Patient-provider communication

**Lecturer:** Betsy Sleath, PhD**Learning objectives:**

- 1) Define and explain the following types of provider-patient encounters: paternalism, mutuality, consumerism, and default.
- 2) Describe how gender, ethnicity, language, and age influence provider-patient encounters.
- 3) Explain how provider interaction style has been found to impact patient outcomes.

**Assigned readings:**

Glanz: Chapter 11

Chewning B., Sleath B. Medication decision making and management: a client-centered model. Social Science and Medicine. 1996; 42(3):389-398

Health Communication. Chapter 11 In: Health People 2010.

Stevenson F, Barry C, Britten N, Barber N, Bradley C. Doctor-patient communication about drugs: the evidence for shared decision-making. Social Science and Medicine. 2000; 50:829-840.

Svarstad B, Bultman D, Mount J. Patient counseling provided in community pharmacies: effects of state regulations, pharmacist age, and busyness. J Am Pharm Assoc. 2004;44:22-29.

**Article to critique:**

Bultman DC, Svarstad BL. Effects of physician communication style on client medication beliefs and adherence with antidepressant treatment. Patient Educ Counsel. 2000 May; 40(2):173-85.

Tarn DM, Paterniti DA, Heritage J, Hays R, Kravitz RL, Wenger NS. Physician communication about the cost and acquisition of newly prescribed medications. Am J Manage Care. 2006; 12: 657-664.

**Wednesday, February 18**

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**Topic:**

Sociological influences on physician prescribing; diffusion of innovations

**Lecturer:** Betsy Sleath, PhD**Learning objectives:**

- 1) Describe influences on physician decision-making.
- 2) Explain diffusion of innovations theory.

**Assigned readings:**

Glanz: Chapter 14

Eisenberg J. Sociological influences on decision-making by clinicians. Annals of Internal Medicine. 1979; 90:957-964.

Schwartz R, Soumerai S, Avorn J. Physician motivations for nonscientific drug prescribing. Social Science and Medicine. 1989; 28(6):577-582.

Denig P, Haaijer-Ruskamp M, Zijsling DH. How physicians choose drugs. Social Science and Medicine. 1988; 27(12):1381-1386.

**Articles to critique:**

McKinlay J, Link Cm Arber A, Marceau L, O'Donnell A, Adams A. How do doctors in different countries manage the same patient? Results of a factorial experiment. Health Services Research. 2006;41(6):2182-2200.

Pugh M, Anderson J, Pogach L, Berlowitz D. Differential adoption of pharmacotherapy recommendations for type 2 diabetes by generalists and specialists. Medical Care Research and Review. 2003;60(2):178-200.

**Assignment Due: 1 page description of paper topic**

**Wednesday, February 25**

**Topic:**

Stress, coping, and health behavior

**Lecturer:** Sue Blalock, PhD

**Learning objectives:**

- 1) Describe how stress and coping can influence pharmaceutical use and health outcomes.

**Assigned readings:**

Glanz: Chapter 10

Marteau TM, Weinman J. Self-regulation and the behavioral response to DNA risk information: a theoretical analysis and framework for future research. *Soc Sci Med* 2006;62:1360-8.

Richards TA, Folkman S. Response shift: a coping perspective. In CE Schwartz and MAG Sprangers (Eds), *Adaptation to Changing Health: Response shift in quality-of-life research*. Washington, DC: American Psychological Association, 2000.

Ironson G, O'Cleirigh C, Fletcher MA, Laurenceau JP, Balbin E, Klimas N, et al. Psychosocial factors predict CD4 and viral load change in men and women with human immunodeficiency virus in the era of highly active antiretroviral treatment. *Psychosom Med* 2005;67:1013-21.

**Articles to critique:**

Karoly P, Ruhlman LS. Psychological "resilience" and its correlates in chronic pain: Findings from a national community sample. *Pain* 2006;123:90-7.

Weaver KE, Llabre MM, Duran RE, Antoni MH, Ironson G, Penedo FJ, et al. A stress and coping model of medication adherence and viral load in HIV-positive men and women on highly active antiretroviral therapy (HAART). *Health Psychol* 2005;24:385-92.

**Wednesday, March 4**

**Topic:**

**8:30-9:45 Literacy, health literacy and the readability of written health information**

**Lecturer:** Betsy Sleath, PhD

**Learning objectives:**

Understand the extent to which literacy and health literacy are a problem in the U.S. and North Carolina

Describe the different methods that can be used to assess health literacy.

**Article to critique:**

Rothman RL et al. Influence of patient literacy on the effectiveness of a primary care-based diabetes disease management program. *JAMA*. 2004;292(14):1711-1716.

**9:45-11:00 Risk Communication**

**Lecturer:** Susan Blalock, PhD

**Learning objectives:**

- 1) Describe the major tenets of Fuzzy Trace Theory
- 2) Discuss the factors that can affect how individuals interpret risk information

**Assigned reading:**

Reyna VF, Brainerd CJ. Numeracy, ratio bias, and denominator neglect in judgments of risk and probability. *Learning and Individual Differences*. 2008;18:89-107.

Lipkus IM. Numeric, verbal, and visual formats of conveying health risks: Suggested best practices and future recommendations. *Med. Decis. Making*. 2007;27(5):696-713.

**Wednesday, March 11: NO CLASS, Spring Break**

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**Wednesday, March 18**

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**Topic:**

**Lecturer:** Betsy Sleath, PhD

Andersen's behavioral model: health care utilization model

**Learning objectives:**

- 1) Explain Andersen's health care utilization model
- 2) Apply Andersen's health care utilization model to pharmaceutical use.

**Assigned readings:**

Aday LA, Andersen RM. Equity of access to medical care: A conceptual and empirical overview. *Medical Care*. 1981; 19(12) Supplement: 4-27.

Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*. 2005; 36(1): 1-10.

Gelberg L, Andersen RM, Leake BD. The behavioral model for vulnerable populations: Application to medical care use and outcomes for homeless people. *Health Services Research*. 2000;34(6):1273-1302.

Fiellenbaum GG, Horner RD, Hanlon JT, et al. Factors predicting change in prescription and nonprescription drug use in a community-residing black and white elderly population. *J Clin Epidemiol*. 1996; 49(5): 587-93.

**Articles to critique:**

Smith SR, Kirking DM. Access and use of medications in HIV disease. *Health Services Research*. April 1999, Part 1;34(1):123-144.

Thorpe J, Sleath B, Kalinowski Thorpe C, Van Houtven CH, Blalock SJ, Landerman LR, Campbell WH, Clipp EC. Caregiver psychological distress as a barrier to influenza vaccination among community-dwelling elderly with dementia. *Medical Care*. 2006;44:713-721.

**Assignment Due: Book Assignment**

Wednesday, March 25

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**Topic:**

**Lecturer:** Gina Upchurch, RPH, MPH

The Precede/Proceed Planning Model  
Senior Pharmacist: Applying the Model to Practice

**Learning objectives:**

- 1) Explain the Precede/Proceed Planning Model
- 2) Apply the Precede/Proceed Planning Model to providing pharmaceutical care

**Assigned readings:**

Glanz: Chapter 18

Wednesday, April 1

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**Topic:**

**Lecturer:** Sue Blalock, PhD

Theory of Reasoned Action and the Theory of Planned Behavior

**Learning objectives:**

- (1) Explain the theory of reasoned action and the theory of planned behavior.
- (2) Apply the theory of reasoned action to pharmaceutical use.

**Assigned readings:**

Glanz Chapter 4

**Articles to critique:**

Herbert KE, Urmie JM, Newland BA, Farris KB. Prediction of pharmacist intention to provide Medicare medication therapy management services using the theory of planned behavior.

*Res Social Adm Pharm* 2006;2:299-314

Gupchup GV, Abhyankar UL, Worley MM, Raisch DW, Marfatia AA, Namdar R.

Relationships between Hispanic ethnicity and attitudes and beliefs toward herbal medicine use among older adults. *Res Social Adm Pharm* 2006;2:266-79

Wednesday, April 8

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**Topic:**

**Lecturer:** Sue Blalock, PhD

Stage models of change

**Learning objectives:**

- 1) Explain the transtheoretical and precaution adoption process models of change.
- 2) Apply the transtheoretical and precaution adoption process models of change to pharmaceutical use.

**Assigned readings:**

Glanz: Chapters 5, 6

Ficke DL, Farris KB. Use of the transtheoretical model in the medication use process. *Ann Pharmacother.* 2005;39:1325-30.

**Article to critique:**

Berger BA, Hudmon KS, Liang H. Predicting treatment discontinuation among patients with multiple sclerosis: application of the Transtheoretical Model of Change. *J Am Pharm Assoc* (Wash DC) 2004; 44(4):445-454.

Berger BA, Liang H, Hudmon KS. Evaluation of software-based telephone counseling to enhance medication persistency among patients with multiple sclerosis. *J Am Pharm Assoc* (Wash DC) 2005;45:466-72.

Wednesday, April 15

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**Topic:**  
Book Assignments Discussion

**Lecturer:** Betsy Sleath, PhD

Wednesday, April 22

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**Topic:**  
Social cognitive theory

**Lecturer:** Sue Blalock, PhD

**Learning objectives:**

- (1) Explain social cognitive theory.
- (2) Define and apply the principle of self-efficacy.

**Assigned readings:**

Glanz: Chapter 8

Chao J, Nau DP, Aikens JE, Taylor SD. The mediating role of health beliefs in the relationship between depressive symptoms and medication adherence in persons with diabetes. *Res Social Adm Pharm* 2005;1:508-25

**Articles to critique:**

Liu Y, Doucette WR, Farris KB, Nayakankuppam D. Drug information-seeking intention and behavior after exposure to direct-to-consumer advertisement of prescription drugs. *Res Social Adm Pharm* 2005;1:251-69.

Smith SR, Rublein JC, Marcus C, et al. A medication self-management program to improve adherence to HIV therapy regimens. *Patient Educ Couns* 2003; 50:187-199.

**Final Papers Due April 29, 2009 at 11am in Dr. Sleath's mailbox**