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ABSTRACT

Much of the practice of community health nurses is focused on health promotion. Nurse-client contracting has been used with clients experiencing hypertension, diabetes, or arthritis. A study was conducted to determine whether nurse-client contracting would be useful as a method for providing nursing care to assist sexually active young women to reduce their risk of having an unintended pregnancy. The pretest-posttest field experiment involved subjects in two contracting groups and one control group. Of subjects involved in contracting, 50 received a client-selected reinforcer for each contract fulfilled and 51 received no reinforcers. The 101 contracting subjects wrote a total of 286 contracts. The family planning nurse-client contracting process included four phases: assessment, planning, implementation, and evaluation. The results indicated that subjects chose a wide variety of behaviors for their contracts. Both of the contracting groups wrote approximately the same number of contracts. Subjects who received reinforcers fulfilled significantly more of their written contracts than did subjects in the non-reinforcement group. Subjects who did not receive reinforcers were significantly more likely to drop out of the study than those who received reinforcers. Although both forms of contracting resulted in positive gains in subject knowledge and health behavior, these findings indicated that contracting with reinforcement had definite advantages over contracting without reinforcements. (NB)

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HEALTH PROMOTION THROUGH THE USE OF NURSE-CLIENT CONTRACTS

by

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## Introduction

As nurses, we are responsible for the overall plan of nursing care for our clients, and accountable to them for providing the highest quality care possible, given the numbers and kinds of available resources. Often, we find ourselves wondering if what we do really makes any difference to the patient or client's health, either in terms of preventing health problems or assisting the client cope with deviations from health. Clinical nursing research helps us explore what we do with clients, answer questions about how we currently practice and raise questions about how we might practice in order to provide optimally effective care to people.

Much of our practice as community health nurses is focused on health promotion, that is: "activity deliberately planned and purposely directed toward increasing a person's ability to function, and facilitating a maximal state of physical, mental and social well-being" (Innes & Ciliska, 1985). Deliberate planning and goal directed nursing activity is essential to the professional practice of nursing. Increasingly, nurses are expected to provide careful and thorough documentation of the plan for care and the outcomes of that care. Nurse-client contracting is a process whereby the client, in consultation with a nurse, chooses to perform a specific health-related behavior and makes a written agreement to do so (Steckel, 1982). Contracting may occur with or without provision of tangible reinforcers to clients who fulfill their contracts. The author thought that the use of written nurse-client contracts between nurses and patient /clients would be a useful way to provide both the nurse and the client with a specific focus for health-related action.

Prior to this study, nurse-client contracting had been used exclusively with clients who were experiencing deviations from health such as hypertension, diabetes or arthritis. This study focused on prevention through risk reduction (including risk appraisal, behavioral analysis, behavioral change and self-management of personal health), and used nurse-client contracting on a large scale. Data were collected on the nursing process and clinical outcomes of the intervention.

### Purpose

The purpose of the study was to determine whether nurse-client contracting was useful as a method for providing nursing care to assist sexually active young women to reduce their risk of having an unintended pregnancy.

### Design

The study design was a pretest-posttest field experiment having two experimental groups, both of which wrote contracts with a nurse, and a control/comparison group which did not write contracts. Subjects were randomly selected and randomly assigned to groups. Altogether, 101 subjects in the study wrote a total of 286 contracts. Fifty subjects received a client-selected "reinforcer" for each contract fulfilled, and fifty-one did not receive tangible reinforcers for fulfilling their contracts. The remainder of this paper will refer only to those subjects who were involved in "contracting".

### The Family-Planning Nurse-Client Contracting Process

The family-planning nurse-client contracting process used in this study was designed by Van Dover based on the work of Steckel, and included four action phases: assessment, planning, implementation and evaluation. These

phases are probably familiar to you as "the nursing process". After client selection and random assignment to treatment group, the assessment phase began.

#### ASSESSMENT

First, the client completed the pretest instrument, which was designed to measure knowledge about family planning, reproductive history and family planning behaviors. Next, the nurse scored the knowledge quiz and reviewed the client's contraceptive and gynecological history. Following this, the nurse gave feedback to the client concerning her score on the knowledge quiz and how the client's score compared with others. After obtaining clarification from the client regarding any important points from the client's history or current family planning behavior, the nurse gave the client feedback concerning her relative risk for unintended pregnancy. As part of this feedback, the nurse pointed out those factors which were contributing to risk.

#### PLANNING

On the basis of the assessment, the nurse and client began a discussion to identify actual and/or potential client needs or problems which required attention. The nurse and client then discussed possible actions or solutions to address the needs or problems. The nurse asked the client to make a decision about what she saw as her highest priority problem or desired focus. Based on the client's priorities, the nurse assisted the client to select a desired, appropriate action to address the problem or need.

#### IMPLEMENTATION

Having selected a specific focus, the client wrote her own contract,

including the following items: a behavior she agreed to perform, a reinforcer (if contracting with reinforcement) and criteria for evaluation. Examples of contracts written with and without a reinforcer may be found in Table 1. The evaluation criteria were very important, because they were used by the nurse and client at the next visit to determine whether or not the contract was fulfilled. After both client and nurse signed the contract, the nurse provided the client with a copy of the contract, learning materials and additional information, if needed. The client then left the clinic with her copy of the contract, and attempted to fulfill it.

#### EVALUATION

In this study, each client returned to clinic about two weeks after writing each contract. There was some variation in the time frame, to accommodate individual schedules and the degree of urgency of the client's problem or need. The nurse and client determined whether or not the contract was fulfilled. Subjects in the contracting with reinforcement group were given a reinforcer of their choice, for fulfilling the contract. Then, the client and nurse decided whether the contract was helpful in meeting the client's need or in solving an actual or potential problem. After this assessment, the client and nurse decided whether to continue to focus on that need or problem or to select another focus for action. After evaluation, the nurse and client engaged in further planning and negotiation of the next nurse-client contract.

#### Results

Subjects chose a wide variety of behaviors for their contracts. These are summarized in Table 2. For subjects who received reinforcers, a summary of

CONTRACTSUBJECT # XXXX

I, Sally, will write down the  
time I take my pill each  
day

in return for \$5.00 toward next pill pack

SIGNED Sally Simms DATED 1-15-85

SIGNED Leslie VanDover

Means of recording to be used: chart of times

CONTRACTSUBJECT # XXXX

I, Tanya, will read "A Book about  
Birth Control" to learn more about  
different contraceptive options available.

SIGNED Tanya Hice DATED 10-20-84

SIGNED Leslie VanDover

Means of recording to be used: write list of questions  
from reading.

Table 2

Summary of Behaviors Chosen by Clients for Contracts

Behavior Chosen	Frequency	
	With Reinforcement	Without Reinforcement
read pamphlet on pill	22	20
note time pill taken daily	18	9
read birth control pamphlet re: various methods	16	9
take pill at certain time	11	13
identify a visual reminder	10	9
increase quiz score by a specified amount	13	8
take temp. for BBT method	7	9
associate pill taking with another behavior	6	13
investigate alternatives to pill	6	10
practice inserting diaphragm	6	1
discuss birth control with partner - make choice	6	6
read about "natural" methods	5	7
find out what others think about birth control	5	4
try "Today" sponge	4	3
use barrier method more consistently	4	11
calculate "safe period" by calendar method	3	3
buy thermometer for BBT	3	5



Table 2 (continued)

Summary of Behaviors Chosen by Clients for Contracts

Behavior Chosen	Frequency	
	With Reinforcement	Without Reinforcement
have diaphragm fitting	2	0
observations for mucus method	1	7
check method	3	2
choose time to take pill	0	2
write personal pros/cons of various methods	3	0
keep clinic appointment	0	3
attend birth control lecture	1	1

their choices is provided in Table 3. For this population, contraceptives and money were the most popular choices. Some of those who experienced contracting with reinforcement had initial difficulty in selecting a reinforcer. A "Menu" of possible reinforcers gave suggestions which they found helpful.

In general, the clients responded very positively to the contracting process. When asked whether the process of contracting was valuable to them or not, subjects who received reinforcers were more likely to say that they found the process valuable (Chi-square = 9.2930;  $df = 2$ ;  $p = .0096$  sig.). While eight subjects in the contracting without reinforcement group said that contracting was not valuable to them, none of those in the contracting with reinforcement group held that opinion.

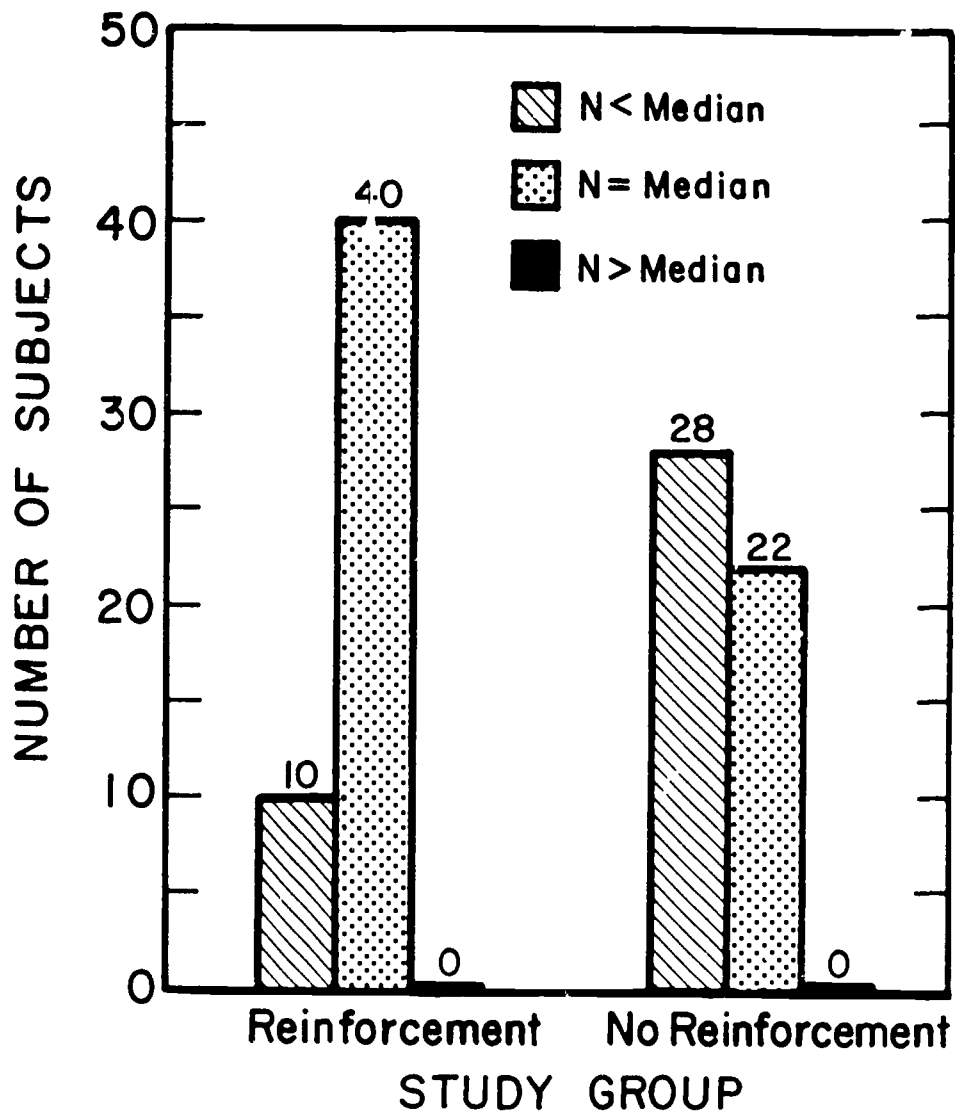
Both of the contracting groups wrote about the same number of contracts. There was a tendency for those who received reinforcers to be more willing to write the maximum number of contracts allowed in the study (3). Those subjects who received reinforcers did fulfill significantly more of their written contracts than the non-reinforcement group (Mann-Whitney  $U = 778.5$ ;  $p = .0001$  sig.). The median number of contracts fulfilled by the two groups was 3. Figure 3. shows that a greater number of subjects in the group which received reinforcers, (40 as compared with 22 of the non-reinforced subjects) fulfilled the maximum number of contracts. When subjects who fulfilled their contracts were compared with those who did not, no significant differences were found among any of the demographic variables measured. Regardless of the extent of "good intentions" to perform a desired, health-related behavior at the time of writing the contract, the impetus to follow through and actually perform the behavior specified in the contract seems to have been stronger when

Table 3

Summary of Reinforcers Chosen by Clients

Type of Reinforcer	Frequency
contraceptives (oral =17; barrier =11)	28
money	20
clothes	13
plant/flowers	11
contraceptives (sponge, jelly, condom)	11
miscellaneous	10
magazine/book	10
food treat	8
cassette tape	7
movie tickets	7
personal care products	7
earrings	5
dinner out	5
poster	5
record	3
stamps	3
camera (\$ toward purchase of)	3
course pack	2

**FIGURE 3** Number of Contracts Fulfilled by Subjects in the Two Contracting Groups



the subject anticipated reinforcement.

When compared with the other contracting group, subjects who received reinforcers were significantly more likely to discuss their contracting experience with others than those who did not receive tangible reinforcers (Mann-Whitney  $U = 611$ ;  $p = .0000$  sig). Those who received reinforcement were most likely to discuss birth control with their sex partners (an important aspect of family planning behavior). In the group which received reinforcers, 90% of the young women had such discussions, compared with 78% among those who wrote contracts but did not receive tangible reinforcers and 63% of those in the control group (Chi-square = 1.489;  $df = 4$ ;  $p = .0091$  sig.; contingency coefficient = .29).

Although it was not possible to test the relationship statistically, the investigator noted that clients in the contracting without reinforcement group were much more likely to cancel appointments or to be "no show's" for their scheduled follow-up visits. This is important, because missed appointments are expensive to the agency and frustrating to the nurse who must plan time to see as many clients as possible in a day. Subjects who did not receive tangible reinforcers were significantly more likely to drop out of the study (Chi-square = 8.453;  $df = 2$ ;  $p < .02$  sig.) than those who received reinforcers or controls.

Subjects in both contracting groups became significantly more knowledgeable about family planning than control subjects. There was also an improvement in consistency in use of contraception for all subjects who wrote contracts, but not for the control group. More detailed data on these changes were presented in the paper "Use of Nurse-Client Contracting to Reduce Risk of Unintended Pregnancy in an Adolescent Population", which was presented

yesterday.

Subjects were asked for their impressions of the nurse who wrote contracts with them, since it was thought that this might be an important variable in influencing the behavioral outcomes of the study. Subjects in both contracting groups had very positive impressions of the contracting nurse. There was no difference between the two contracting groups regarding the extent of their positive impressions of the contracting nurse (Mann-Whitney  $U = 1031.5$ ;  $p = .0941$  n.s.).

#### Implications for use of contracting in health promotion

This study demonstrated that the use of written nurse-client contracts is feasible, effective and well received by clients who were a part of this study. Nurses who are involved in prevention and health promotional programs should consider nurse-client contracting as a viable and valuable option for use with clients in ambulatory care and other community based settings.

Although both forms of contracting resulted in positive gains in subject knowledge and health behavior, it is clear that contracting with reinforcement produced more positive outcomes in the following areas: a lower attrition rate, fewer missed appointments, a client who values the process of contracting to a greater degree, a client who is willing to continue to write contracts with the nurse for a longer period of time, and a client who has greater success in fulfilling contracts once they are written. On the basis of the results of this study, contracting with reinforcers has definite advantages over contracting without client-selected reinforcers. It remains to us to find the resources which would enable us to provide contracting with reinforcement to those clients who require such assistance to make changes in their health

behavior.

I would like to encourage other nurses to try nurse-client contracting in their everyday practice. My experience is that it provides both the nurse and client with an enjoyable experience that includes: a specific focus for action, a documented record of care, and clearly defined criteria for evaluation.

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