Attitudes, Intentions, and Ethical Stance of Advanced Practice Nursing Students toward Abortion Provision: Part One – Quantitative Findings

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ABSTRACT

The availability of pre-implantation abortion pills has increased the probability that advanced practice nurses (i.e., nurse practitioners and certified nurse midwives) will be instrumental in providing abortion services in the United States. The purpose of this pilot study was to determine the attitudes, intentions, and ethical stance of advanced practice nursing students towards the provision of abortion services. The study was a descriptive cross-sectional survey of 53 advanced practice nursing students at a private Midwestern Catholic university. A multi-item abortion attitude survey was administered to students in three required courses. The survey included a section on ethical principles and open-ended questions on abortion attitudes. The nursing students were either in a woman-related specialty, pediatrics, or in general adult nursing; most were between the ages of 24-29 (60.5%); and most (66.0%) were Roman Catholic. A majority (61.5%) did not feel that abortion should be available under any circumstance. However, 54% felt that advanced practice nurses should be able to provide abortion services. Few (7.7%) plan on incorporating abortion into their practices but 74.4% would refer for abortion services. The most frequent reasons for not willing to provide abortion were: (1) out of scope of practice (53.8%), (2) religious beliefs (59.0%), and (3) personal values (64.1%). The respondents for most part indicated either Sacred Life (43.6%) or Human Life/Utilitarian (48.7%) as their ethical stance. The Human Life/Utilitarian students had a significantly higher willingness to provide abortion services than Sacred Life students ($p < 0.05$). Although the majority of advanced practice nursing students did not intend to provide abortion services, most were open to referring for abortion services and saw abortion as a personal right.

RESEARCHERS AT the University of Washington (UW) recently conducted a descriptive study to determine the willingness among professional health care students (i.e., advanced practice nursing, medical, and physician assistant students) to provide abortion services (Shotorbani, Zimmerman, Bell, Ward, & Assifi, 2004). The UW researchers expressed concern that there would not be enough health care providers trained to provide abortion services for future needs. They also mentioned that 87% of the counties in the United States do not have an abortion provider, that the number of current abortion providers is declining, and that many of the providers are fifty years of age or older (Finer & Henshaw, 2003; Henshaw, 1998).

The UW researchers administered a 22-item abortion attitude survey to 363 (1st and 2nd year) advanced practice nursing students, physician assistant students, and 2nd year medical students. Three hundred twelve students completed the questionnaire for a response rate of 86%. Of the 312 students, 70% indicated legal abortion services should be available under any circumstance, and 72.8% agreed that it is acceptable for a woman to choose an abortion because of a fetal anomaly or congenital disorder. Only 31% planned to provide medical abortion and only 18% planned on including surgical abortion in their future practice. However, 90% would be willing to refer patients for abortion services.

Interestingly, 42% of the medical students as compared to 83% of the nursing students felt that advanced clinical providers should be able to provide medical abortion, and 21% of the medical students as compared to 72% of the nursing students felt that advanced clinical providers should be able to provide surgical abortion services. One reason that fewer medical students as compared to nursing students felt advanced practice providers should be able to provide abortion services was that the medical students believed it was out of the scope of practice for physician assistants and advanced practice nurses. However, recent studies among medical and surgical abortion providers indicate acceptance of advanced practice (mid-level) providers in the provision and referral of medical abortion with good backup support (Harris, 2004; Beal & Simmonds, 2002; Beckman, Harvey, & Satre, 2002; Narrigan, 1998).

A limitation of the UW study was that there were only 29 nursing student respondents compared to 147 medical students and 136 physician assistant students. Furthermore, over 30% of the students had no religious affiliation and only 24% felt that providing abortion services would be against their religion. Other limitations of the study, mentioned by the authors, were that students attending UW are more liberal than students in other areas of the country and that UW has a history of offering abortion training.

Surprisingly, there have been few published research studies on abortion attitudes among nursing students and professional nurses. This might be because of the divisiveness that this issue can generate among health professionals (Timpson, 1996). A study conducted with 112 Japanese nursing students showed that among twelve reasons for induced abortion, the most frequent reason for not approving abortion was for the unwanted sex of the unborn baby (Nakayama, Ishizaka, & Mizutani, 1986). A study among Korean nursing students on attitudes towards ethical issues revealed three ethical stances in regards to the life of the unborn, i.e., sacred, scientific, and humane (Yeun, Kwon, & Kim, 2004). A recent study in the U.S. examined attitudes of professional nurses in the labor and delivery setting and found that although 95% would agree to care for patients terminating a pregnancy, few nurses would care for patients terminating a pregnancy due to sex selection, selective reduction, or for personal reasons (Marek, 2004).

There is a need to replicate the UW abortion attitude study in other settings in order to get a broader and more diverse view towards abortion provisions among future advanced practice nurses in the U.S. Furthermore, there is a need to replicate this study to obtain a deeper understanding of why advanced practice nurses would or would not provide abortion services and to analyze how abortion services fit or do not fit within the scope of nursing practice and philosophy of care. To do this, the UW study was replicated among Marquette University graduate nursing students. In order to provide an ethical context for this study, the students were asked to place their responses into a framework of principle-based ethics (Day, Drought, & Davis, 1995). The principle-based ethics were those defined in the Belmont conference on bioethics (Beauchamp & Childress, 1989) and identified as a component of

advanced nursing practice by the American Association of Colleges of Nursing (2003).

The specific purpose of this study was to determine attitudes, intentions, and ethical reasons to provide (or not to provide) abortion services among future advanced practice nurses. For this study, advanced practice nursing students are those pursuing a master's degree in nursing. The specific research questions are as follows:

1. What are the attitudes towards abortion services among advanced practice (masters) nursing students in a private university?
2. What are the intentions to provide abortion services among advanced practice (masters) nursing students in a private university?
3. What ethical principles do advanced practice nursing students use to determine willingness to provide or not provide abortion services?

METHOD: DESIGN

This was a cross-sectional anonymous descriptive survey of direct entry and first- and second-year graduate nursing students. This was considered a pilot study, with a larger survey of advanced practice nursing students planned for the future. Data from this pilot study will be used to refine the research methods and the survey instrument.

PARTICIPANTS

The eligible participants for this pilot study were advanced practice (masters) nursing students at Marquette University. Students from three graduate courses were invited to participate during a scheduled class period. The three courses include two graduate nursing research courses with a total of 42 students, and a graduate theory course with 16 students. Of the 58 potential participants, four students were absent from the class period in which the abortion attitude questionnaires were distributed. The final number of respondents was 53, for a 98% response rate.

SURVEY/QUESTIONNAIRES

Abortion Attitudes & Intentions: The abortion attitude questionnaire is a

twenty-item instrument designed by a UW study team and reviewed by UW faculty (Shotorbani, et al., 2004). The survey has six items to determine abortion attitudes, four items on intentions to provide or refer for abortion services, six items to quantify reasons for not providing abortion services, and four items that determines willingness for abortion training. In addition there are five items that elicit demographic information. Another twelve items from the Nakayma et. al. (1986) study were included in the survey to determine "willingness to provide abortion." The twelve items were twelve potential reasons for providing abortions, from "sex of the baby" to "life of the mother." Each item was scored as follows: Yes = 3; Undecided = 2; No = 1. The total possible scores were 12 to 36, with the higher number indicating more willingness to provide abortion.

Ethical Principles: Twenty-three additional items were included in the questionnaire to analyze ethical principles. Three of the items were taken from a questionnaire for a study analyzing nursing ethics (Yeun, et al., 2004). These items were developed through a Q-Sort process and ended with three types of ethical attitudes in regards to human life, i.e., Sacred-Life, Science-Realistic, and Humane Life–Utilitarian. "Sacred-Life" refers to the belief that life belongs to an absolute power (God) and that life is a high and noble. "Science-Realistic" refers to the belief that the life of the fetus does not have an absolute value in itself. "Humane Life–(Utilitarian)" refers to the belief that the choice of the mother and her life circumstances necessitate access to abortion.

The other eighteen items were from a study on principle-based ethics and nurses' attitudes towards artificial feeding (Day, Drought, & Davies, 1995). These principles are basic bioethical principles used by health professionals, and they include the principles of autonomy, beneficence, maleficence, and justice. Each of these ethical principles was listed as a separate item as applied to the mother, the fetus, and the mother-fetus dyad. The principles "sanctity of life" and "quality of life" (as defined by Shannon, 1993) were included in the list of choices and applied to the mother, the fetus, and the mother-fetus dyad.

PROCEDURE

The questionnaire on abortion attitudes and ethical principles was administered during three scheduled graduate nursing classes. The students were provided with a brief written and oral description of the study before the administration of the survey. The investigator administered the questionnaire with the assistance of the professor for the assigned class. The investigator had the questionnaire administered by another professor during his graduate research class, and he was not present in the classroom when it was administered. Questionnaires took about 20 minutes to administer and complete.

HUMAN SUBJECT PROTECTION

The survey was administered anonymously, i.e., there were no identifying indicators on the survey. The students were invited to participate and were informed that participation was voluntary. This research study was approved by the Marquette University Office of Research Compliance and was provided exempt status.

Measures to protect student/subject's rights included: (1) participation was not required for any of the courses in which the questionnaire was administered; (2) there was no extra credit provided for participating; (3) since there were only a few males in the courses, identification of gender was not asked; and (4) data from the questionnaires was presented in aggregate form.

RESULTS

Demographics. See Table 1. Compared to the 29 nursing students at UW, the 53 MU nursing students had intended specialty areas that were more evenly distributed, with the majority (68%) choosing pediatrics, women's health, or adult health as their chosen specialty areas. Most (89.7%) of the UW students identified either family practice or obstetrics and women's health as their specialty area. The majority (71.7%) of the MU students intended to practice in the urban area, whereas only 41.4% of the UW students intended to do so. UW students tended to be older than the MU students and were composed of fewer Catholics. Most MU students were either Catholic (66%) or Protestant (18.9%) and only 7.5% of the MU students listed "none" for religion.

Attitudes towards abortion services. See Table 2. The majority of MU nursing students (52.8%) did not agree that elective abortions should be legal under any circumstances as compared to 82.8% of the UW nursing students who agreed that abortion should be offered under any circumstances. Furthermore, only 47.2% of MU students felt that abortion was acceptable for fetal anomaly or congenital disorder as compared to 79.3% of UW students who felt abortion was acceptable for those reasons. A slight majority of MU students (52.8%) indicated that advanced practice nurses should be able to provide medical abortion as compared to 82.8% of UW students. Only 30.2% of MU students agreed that advanced practice nurses should be able to provide surgical abortion compared to 72.4% of UW students. A similar percentage of MU students (20.8%) and UW students (24.1%) were more comfortable with medical abortion than with surgical abortion.

Intention to Provide Abortion. See Table 3. Only a few (5.7%) MU students plan to incorporate either medical or surgical abortion into their practice as advanced practice nurses or perform abortions for patients regardless of reason (11.3%). In comparison, 48.3% of UW nurses plan to provide medical abortion and 20.7% plan to provide surgical abortion. In addition, 44.8% of the UW nurses plan on providing abortion for any reason. A high proportion of MU nursing students (75.5%) and UW nursing students (98.7%) would be willing to refer for abortion services.

See Table 4. The most frequent reason for not intending to provide abortion services by MU nursing students were personal (60.4%), outside of scope of practice (52.8%), and against their religious beliefs (50.9%). These were the three most frequent reasons given by the UW nurses but only 20.7% responded for each. Few MU nurses (3.5%) felt that they would be ostracized, and few (6.9%) felt that they would be harassed for providing abortion services. Few UW nurses (10.3%) felt that they would be harassed or ostracized.

See Table 5. Many of the UW students were willing to attend either a required or an elective abortion training program (69% for each) as compared to 37.7% of the MU students who would be willing to attend a required program or (30.2%) willing to take an elective course. Few MU

students (9.4%) would be interested in a practice site that specifically includes abortion training as compared to 37.9% of UW students.

Ethical Base for Abortion Decisions: See Table 6. The ethical stances for abortion decision-making among MU advanced practice nursing students were essentially divided between Sacred-Life (37.7%) and Humane Life–Utilitarian (56.6%). Only 5.7% viewed their ethical stance as Science-Realistic. There was a significant difference among the three groups of students (based on ethical stance) mean "willingness to provide abortion" scores (Sacred Life = 15.5, SD = 5.4; Science-Realistic 21.6, SD = 11.2; Humane Life–Utilitarian = 24.4, SD = 8.8; $F = 7.64$; $p < 0.001$).

See Table 7. The three broad ethical stances were collapsed into two by taking the three respondents who identified their ethical stance as Science-Realistic and placing them into the Humane Life–Utilitarian category. The percentages and frequency of responses of the two broad ethical stances were then cross referenced with the six bioethical principles as applied to the mother, fetus, and mother-fetus dyad. The first and second most frequently cited ethical principles for the Sacred Life ethical-stance students were: "non-maleficence for the mother and fetus" and "sanctity of life for the mother and fetus." In comparison, the two most frequently cited ethical principles for the Humane Life–Utilitarian students were "quality of life for the mother and fetus" and "autonomy of the mother."

DISCUSSION

The findings in this paper only include quantitative results. The qualitative findings will be presented in another paper. The quantitative results show that a substantial majority (i.e., > 70%) of Marquette University advanced practice nursing students do not plan on incorporating either medical or surgical abortion into their future practice. However, a substantial majority (75.5%) would be willing to refer for abortion services. The attitudes of the Marquette nursing students toward abortion services are mixed. Slightly less than half (47.2%) believe that abortion service should be available for women for fetal anomaly or

congenital disorder, and slightly more than half (52.8%) believe that advanced practice nurses should be able to provide abortion services. The major reasons that Marquette students gave for not participating in abortion services include religious, personal, and not believing that it is in their scope of practice. Of interest is the fact that although 66% of the students identify themselves as Catholic, only 37.7% of the students identified Sacred Life as their ethical stance towards the provision of abortion services.

In comparison, UW nursing students (and UW Health Science students in general) are much more liberal in their attitudes and intentions toward abortion services than Marquette nursing students (see Tables 2-5). Over 48% of the UW nursing students plan on providing medical abortion, 82.8% believe that abortion services should be legal under any circumstance, 90% would refer for abortion services, and 69% are willing to take elective courses in abortion training. Over 30% of the total UW Health Science students (i.e., medical students, physician assistant students, and nursing students) plan on providing medical abortion, almost 70% believe abortion should be legal under any circumstance, 90% would refer for abortion services, and 55% would take elective courses in abortion training. Only 24% of the UW Health Science students and 21% of the UW nursing students feel that providing abortion is against their religious beliefs, compared to 51% of Marquette nursing students.

In general, the Marquette students are more in the mainstream of nursing students and practicing nurses in regards to abortion attitudes. Recent studies with practicing labor and delivery nurses indicate that nurses are open to caring for patients who have had an abortion but are reluctant to do so for less than very serious reasons and especially reluctant in the second and third tri-semester of pregnancy (Marek, 2004).

Marquette students differ from the UW students in that more identify themselves as Catholic. Few have no identified religious belief system; they are younger and more urban in their intended location of practice, and they are attending a private Catholic University. The choice to attend a large liberal state university as compared to a private Midwestern Catholic university might explain a lot of the differences in

attitudes and intentions for providing abortion services between the nursing students at the two universities.

Of interest is that the number one ethical principle for the Sacred-Life nursing students was "non-maleficence for both the mother and fetus," as compared to "quality of life of the mother and fetus" for the Humane-Life students. Furthermore, the two most frequently cited ethical principles for the Sacred Life students involved both the mother and fetus, while the most frequently mentioned ethical principles for the Humane Life–Utilitarian students (beneficence, non-maleficence, autonomy and legality) were only directed to the mother (see Table 7). This fact provides some evidence that for the Sacred-Life students both the mother and the fetus are considered patients and the unit of direct care, as opposed to only the mother or only the fetus. Also of interest is that "autonomy" for the mother was the second most frequently reported ethical principle as applied to abortion by the Humane Life–Utilitarian students. Autonomy was the number one ethical principle as applied to removal of hydration and feeding at the end of life by cancer and hospice care nurses in a study by Day, et al., (1995).

A limitation of this study is that there were only 53 respondents. This study, however, is considered to be a pilot study. The intention is to replicate this study with more students at Marquette, with health science students other than nursing students (e.g., physician assistant students), and with health science and nursing students at other universities. Another limitation is that these are beginning advanced practice nursing students, some of whom are just beginning in their nursing careers (as second-degree students). Some students are not as aware of what constitutes medical and surgical abortions. A comparison with seasoned advanced practice nurses would be of interest. Finally, this study did not investigate attitudes and intentions toward abortion in conjunction with the length of development of the fetus (by tri-semester) as the Marek (2004) study did. To do so would be recommended.

The quantitative part of this study indicated that most Marquette nursing students did not intend to provide abortion services, but many feel that abortion should be available for certain circumstances (e.g., anomaly of the child). Most indicate that the decision to have or not have an abortion should be a personal right for the woman and use this

approach as their ethical stance. Many see abortion services–especially medical abortion services–as part of the scope of advanced practice nursing. Broad ethical stances of the students were split between Sacred-Life and Humane Life–Utilitarian. The Sacred-Life students tended to apply ethical principles to both the mother and fetus, as compared to a tendency to apply ethical principles only to the mother with the students who took the Humane Life–Utilitarian ethical stance.

The provision of abortion services among advanced practice nurses (especially medical abortion) is likely to increase in the future. This is so because of the continued blurring of medical abortion and contraception. The availability of emergency contraception, post-coital contraception, and once-a-month pills are options already available and will increase in availability in the near future.

Advanced practice nurses who provide medical abortion, surgical abortion, or contraception services take on a model of nursing that abandons the traditional concepts of working with nature, holistic care, and integrating the mind-body-spirit, and that accepts autonomy and personal rights as the primary consideration of care services. The ethical base for this type of practice can be mixed, confusing, and inconsistent. The acceptance of abortion provision as a part of the scope of advanced nursing could be very detrimental to the essence of nursing as a caring profession. The mother-fetus dyad need to be seen as the unit of care for professional nurses, and both mother and fetus need to be seen as possessing full human rights and dignity.

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Table 1. Percentage distribution of respondents to a survey of health science students at the University of Washington (2002), advanced practice nursing students at University of Washington (2002), and advanced practice nursing students at Marquette University (2005) by selected characteristics.

Characteristic	All UW (N=312)	UW Nursing (N=29)	MU Nursing (N=53)
Intended specialty			
Family practice	39.8	51.7	5.7
Ob/Gyn/Women's Health	7.4	38.0	20.8
Pediatrics	5.5	0.0	18.9
Adult/General Medicine	13.3	0.0	28.3
Other	34.0	10.3	26.4
Intended Location of Practice			
Rural	35.3	24.1	24.5
Urban	50.3	41.4	71.7
Other	15.4	31.0	3.8
Residence through age of 15			
Rural	38.5	34.5	45.3
Urban	52.6	58.6	45.3
Other	11.5	10.3	9.4
Age			
18-23	6.7	3.4	7.7
24-29	45.5	27.6	51.9
30-35	22.3	27.6	9.6
$\geq$36	25.5	41.4	30.8
Religion			
Protestant	26.7	31.0	18.9
Catholic	19.6	10.3	66.0
None	31.5	31.0	7.5
Other	22.2	27.6	7.5
Total	100.0	100.0	100.0

Table 2. Percentage distribution of survey respondents, by agreement with statements reflecting general attitudes toward abortion, according to school of nursing.

	All UW (UW Nursing)*		MU Nursing		
Agree	Neither agree nor disagree	Disagree	Agree	Neither agree nor disagree	Disagree
Elective abortion should be legal and accessible under any circumstances.					
69.8	3.2	26.9			
(82.8	0.0	17.2)	34.0	13.2	52.8
It's acceptable for a woman to choose abortion because of a fetal anomaly or congenital disorder.					
72.8	9.6	17.6			
(79.3	6.9	13.8)	47.2	26.4	26.4
I am more comfortable with medical abortion than with surgical abortion.					
35.1	43.4	21.5			
(24.1	62.1	13.8)	20.8	47.2	32.1
Advanced clinical providers should be able to provide medical abortion.					
52.4	15.4	32.2			
(82.8	6.9	10.3)	52.8	15.1	32.1
Advanced clinical providers should be able to provide surgical abortion.					
36.6	18.1	45.3			
(72.4	6.9	20.7)	30.2	20.8	49.1
Every program addressing women's health should include abortion-training.					
64.7	9.5	25.8			

(65.5	10.3	24.1)	47.2	11.3	41.5

* UW School of Nursing percentages are in parenthesis

Table 3. Percentage distribution of survey respondents, by agreement with statements reflecting intention to provide abortion services, according to school of nursing.

	All UW (UW Nursing)*		MU Nursing		
Agree	Neither agree nor disagree	Disagree	Agree	Neither agree nor disagree	Disagree
I plan to incorporate medical abortion into my practice.					
31.2	23.1	45.7			
(48.3	24.1	27.6)	5.7	20.8	73.6
I plan to incorporate surgical abortion into my practice.					
18.0	24.1	57.9			
(20.7	20.7	58.6)	5.7	13.2	81.1
I plan to perform abortion for my patients regardless of their reasons for terminating a pregnancy.					
28.6	17.4	54.0			
(44.8	10.3	44.8)	11.3	11.3	77.4
I would be willing to refer patients inquiring about an abortion to other clinics or providers, if necessary.					
90.4	4.5	5.1			
(89.7	3.4	6.9)	75.5	11.3	13.2

*Results of UW Nursing Students in parenthesis.

Table 4: Percentage of survey respondents giving selected reasons for not intending to provide abortion services by nursing program

Reason	UW	UW Nursing	MU Nursing
It will be outside the scope of my practice	33.7	20.7	52.8
It's against my religious beliefs	24.0	20.7	50.9
It's against my personal values	31.4	20.7	60.4
I will not have the opportunity to be trained in abortion techniques	10.3	17.2	24.5
I may be ostracized by my colleagues and/ or discriminated against in my profession	1.3	3.5	7.5
I fear that either I or my family may be harassed and/or threatened by others	4.8	6.9	9.4

Table 5: Percentage of survey respondents, by agreements reflecting willingness to seek abortion training, according to nursing program.

Reason	UW	UW Nursing	MU Nursing
I am willing to attend a program that requires abortion training in the curriculum	63.8	69.0	37.7
I am willing to take elective courses in abortion training	54.8	69.0	30.2
I will seek a residency program or practicum site that specifically includes abortion training	24.0	37.9	9.4

Table 6: Percent frequency of ethical stance in regard to human life and abortion among MU advanced practice nursing students and mean willingness to provide abortion services (the higher the score = the greater the willingness).

Ethical stance:	N/%	Mean/SD	Willing	F-Test	Prob
Sacred-Life	(20) 37.7	15.5	5.4	7.6	0.001
Science-Realistic	(3) 5.7	21.6	11.2		
Humane-Life–Utilitarian:	(30) 56.6	24.4	8.8		

Table 7: Percent frequency of the top eight ethical principles that MU advanced practice nursing students felt applied to their decision to be willing to provide or not provide medical or surgical abortion services.

N and %	Ethical stance	Rank
28 (52.8%)	Non-maleficence (mother and fetus)	#1 for Sacred Life
27 (50.9%)	Quality of Life (mother and fetus)	#1 for Humane Life
26 (49.1%)	Sanctity of Life (mother and fetus)	#2 for Sacred Life
25 (47.2%)	Beneficence (mother)	#3 for Humane Life
25 (47.2%)	Non-maleficence (mother)	#5 for Humane Life
22 (41.5%)	Autonomy (mother)	#2 for Humane Life
21 (39.6%)	Non-maleficence (fetus)	#4 for Sacred Life
21 (39.6%)	Abortion is Legal	#3 for Humane Life