

Knowledge of Fourth Stage Students of Nursing Colleges in Iraqi Kurdistan Region Concerning Nursing Process (NANDA)

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ABSTRACT

Background and aim: North American Nursing Diagnosis Association (NANDA) is one of Organizations of Nursing in the world to developed nursing process, NANDA began in 1973 by Kristine Gebbie and MaryAnn in Clearinghouse for Nursing Diagnoses-established at (St. Louis University) to develop a diagnostic classification system (Taxonomy) and to identify and approve nursing diagnosis, while the first conference proceedings edited by Gebbie and Lavin are published. The objectives of the study are to assess the knowledge of fourth class students of nursing colleges in Kurdistan Region regarding Nursing Process, to describe the demographic data of the study sample, to know the Source of student's information, and to determine which college of nursing be the first in the rank.

Materials and method: A descriptive (cross sectional) study was carried out at the colleges of nursing / universities of Kurdistan Region. The study started at 10/3/2015 up to the end of December 2015. To achieve the objectives of the study, a non- probability (purposive) sample of all forth class students of colleges of nursing. Data were collected through the use of constructed questionnaire, which included of three parts. The content validity of instrument was established through penal of (7) experts.

Reliability of instrument was determined through the Internal consistently reliability, ($r=0.81$).

Data was collected by (Self-Report) method, using the questionnaire formal and data was analyzed by the application of descriptive and inferential statistical method.

Results: The result of the study indicated that the highest percent of the students was female graduated from secondary school, and they have an intermediate level of knowledge, while the findings of the study indicated that most of student's information's sources were from their teachers. On the other hand the study findings were showed that there was highly significant relationship between student's knowledge and their demographic information.

Recommendations: the study recommended that the teachers of nursing at the colleges and schools in Kurdistan rejoin have to focus on the Conference proceedings edited of (NANDA), farther more nursing process must teach by nursing specialty teachers not physicians.

Keywords: Nursing process, NANDA.

INTRODUCTION

Nursing Process is a Systematic method by which nurse plan and provides care for patient. Nursing process involves a problem-Solving approach that enables the nurse to identify the patient actual and potential problems (Christensen and Kockrow, 2003). The nursing process is a cyclical and ongoing process that can end at any stage if the problem is solved, and exists for every problem that the individual/family/ community has, it is not only focuses on ways to improve physical needs, but also on social and emotional needs as well (Lewis *et. al.*, 2000).

Nursing Process consist of five faces which are, Assessment, Diagnosis, Planning, Implementation, and Evaluation (Barbara and Timby, 2008). Each phase depends on the accuracy of the preceding face; each face involves critical thinking (Kozier and Barbara, 2004).

Assessment is the systematic collection of

subjective and objective data with the goal of making clinical nursing judgment about an individual, family, or community. The verbal statements provided by the patient which include the Cognitive, psychosocial, physical, emotional, cultural, and spiritual components are called subjective data, while objective data includes observable and measurable signs (Susan, 2000).

Nursing diagnosis is clinical judgment about individual, family, or community responses to actual or potential health problems/ life processes, the components of nursing diagnosis includes title (label). (Name for health problem), definition of the title. (Clear description of the problem), contributing factors (etiologic or related factors), and defining characteristics (Manifestation of the problem) (Jennifer, 2005).

During the planning phase of the nursing process, the nurse establishes priorities of care. The problems can be ranked in order of

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importance for the patient's life and health. A useful frame work to guide the prioritization is Maslow's hierarchy of needs; these needs include physical, Safety, Love, Self-esteem, self actualization (Funnell *et. al.*, 2009).

Through the implementation phase of the nursing process, the established plan is put into action to promote outcome achievement. Interventions include both nurse-prescribed and physician-prescribed activities (Reed, 2009).

Nurse evaluates whether the expected patient out-comes and interventions are realistic and achievable? If not, a new plan should be formulated, evaluation includes all the phases of the nursing process; the nurse evaluates the progress toward the goals/outcomes identified in the previous phases. If progress towards the goal is slow, or if regression has occurred, the nurse must change the plan of care accordingly. Documentation is a vital component of the implementation phase (Kim, 2010).

North American Nursing Diagnosis Association (NANDA) is one of Organizations of Nursing in the world to developed nursing process, NANDA began in 1973 by Kristine Gebbie and MaryAnn in Clearinghouse for Nursing Diagnoses-established at (St. Louis University) to develop a diagnostic classification system (Taxonomy) and to identify and approve nursing diagnosis, while the first conference proceedings edited by Gebbie and Lavin are published. North American Nursing Diagnosis Association is not the only organization dedicated to furthering these goals, but it is one of the oldest (Parahoo, 2006).

MATERIALS AND METHOD

Quantitative design, cross-sectional (a descriptive study) was conducted at the Colleges of Nursing/ Universities of IRAQ Kurdistan Region which includes College of nursing /Hawler Medical University, Colleges of nursing in (Selemani, Raparin, and Duhok) universities,

for the period of 10/3/2015 up to the end of December 2015 to assess the knowledge of fourth class students of nursing colleges regarding Nursing Process (NANDA), to describe the Sociodemographic characteristics of the study sample, to know the Source of student's information, and to determine which college of nursing be the first in the rank.

A non- probability (purposive) sample of all forth class students of colleges of nursing in Kurdistan Region, who are total number are (166), as following, College of nursing /Hawler Medical University are (47), College of nursing / University of Selemani are (46), College of nursing / University of Raparin are (36), and College of nursing / University of Duhok are (37).

Data were collected through the use of constructed questionnaire, which included of three parts, the first part consist of (2) items, of the demographic information, and the second part includes (22) items for the student's knowledge, while the third part consists of (4) items which include source of knowledge of the students concerning Nursing process. The content validity of instrument was established through penal of (7) experts. Reliability of instrument was determined through the use of internal consistency reliability, ($r= 0.81$). The two point type Likert scale (Semantic deferential Scale) true and falls is scored as (1) for true and (0) for fall (McRae, 2003) For the scale of (true and falls), mean of score of 0 - 0.33 was considered low significant, (0.34 - 0.66) was considered moderate significant and (0.67 - 1) was considered high significant. Data was collected by (Self-Report) method, using the questionnaire formal and data was analyzed by the application of descriptive and inferential statistical method. Data was organized, and coded into computer files by using the statistical package of social science (SPSS) (V.20).

RESULTS

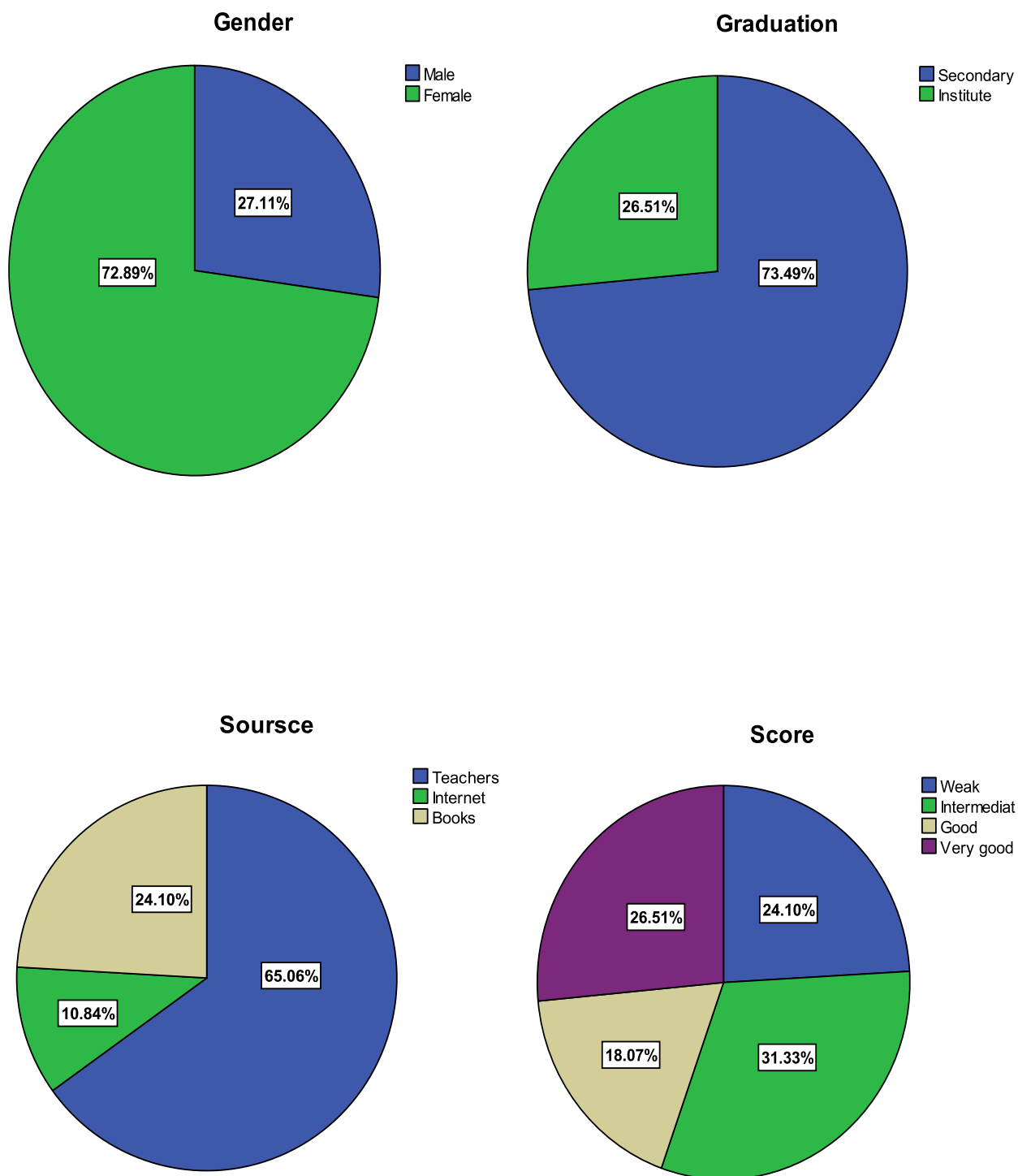


Figure (1): Distribution of the study sample of four colleges of nursing in Kurdistan region.

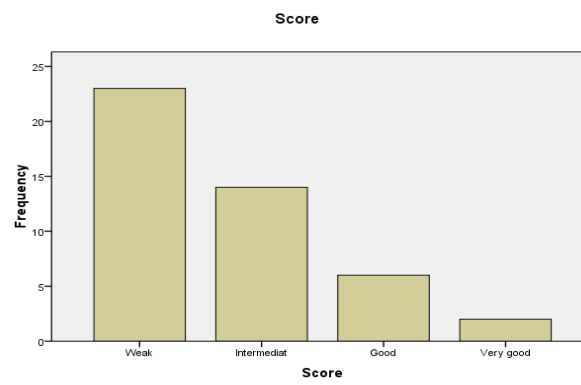
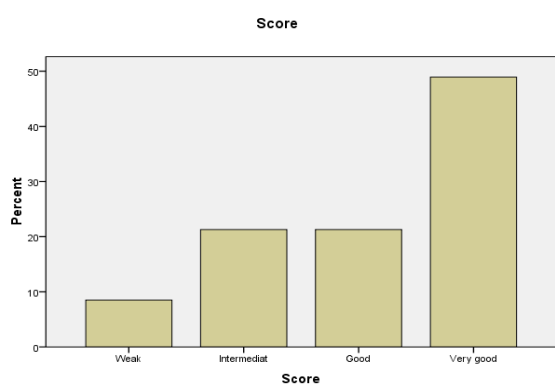
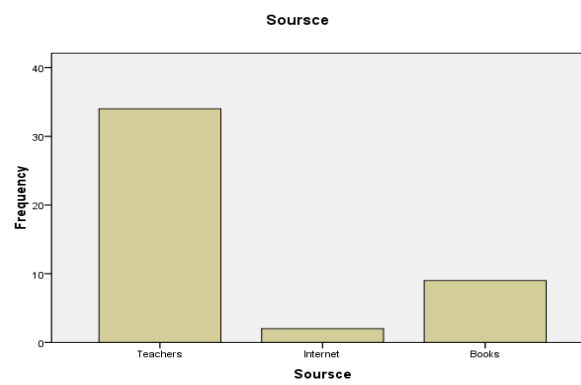
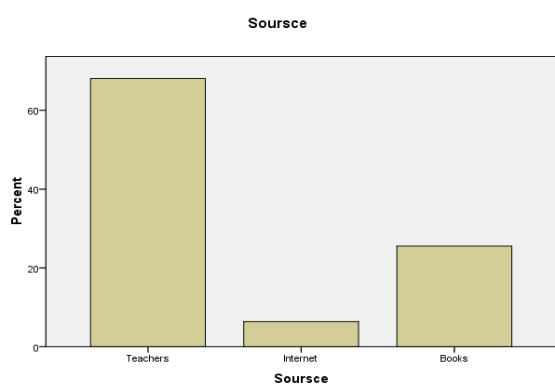
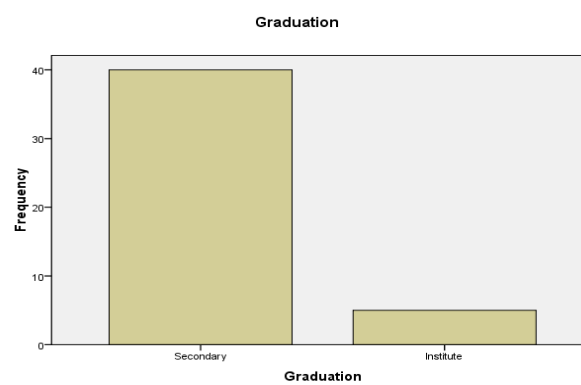
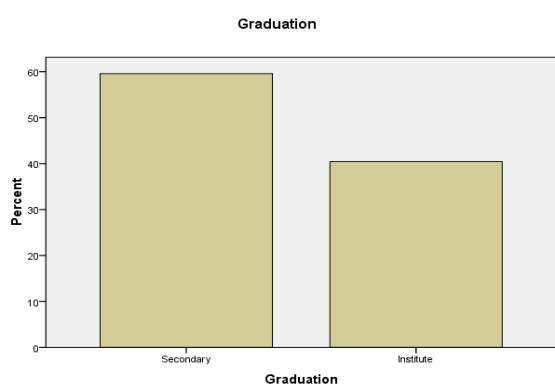
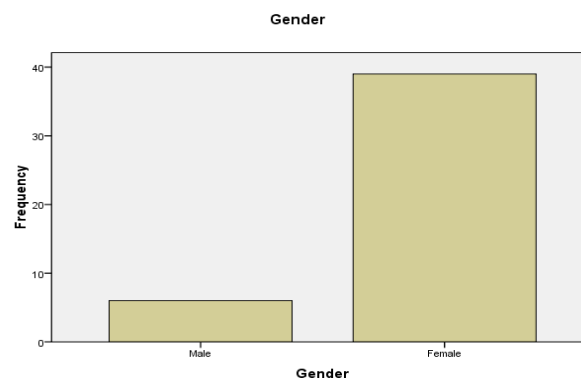
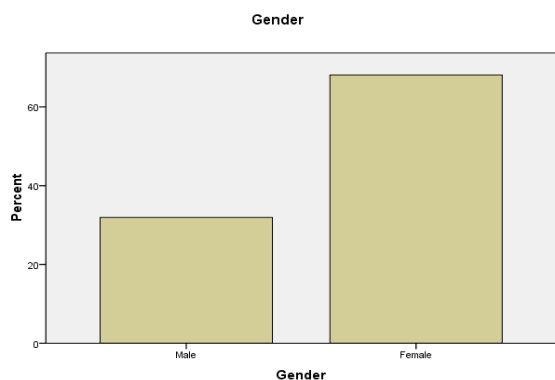


Figure (2): Distribution of the study sample of College of Nursing at Hawler Medical University.

Figure (3): Distribution of the study sample of College of Nursing at Slemani University.

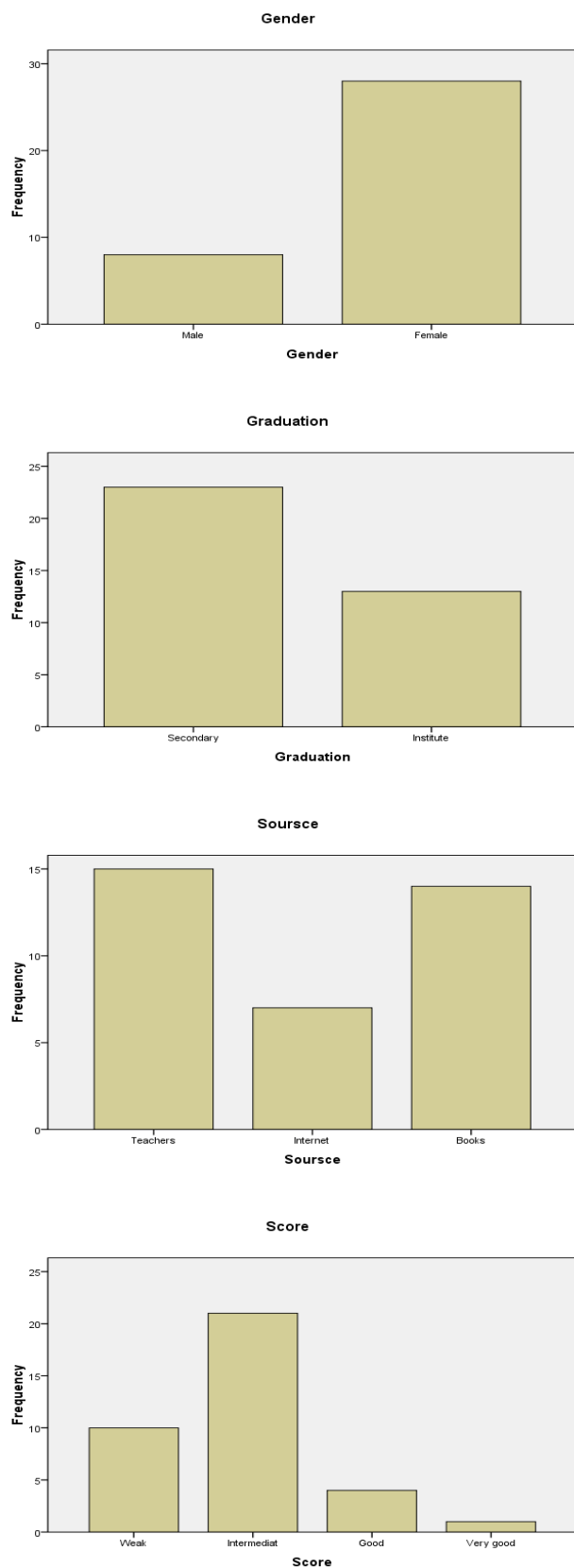


Figure (4): Distribution of the study sample of College of Nursing at Raparin University.

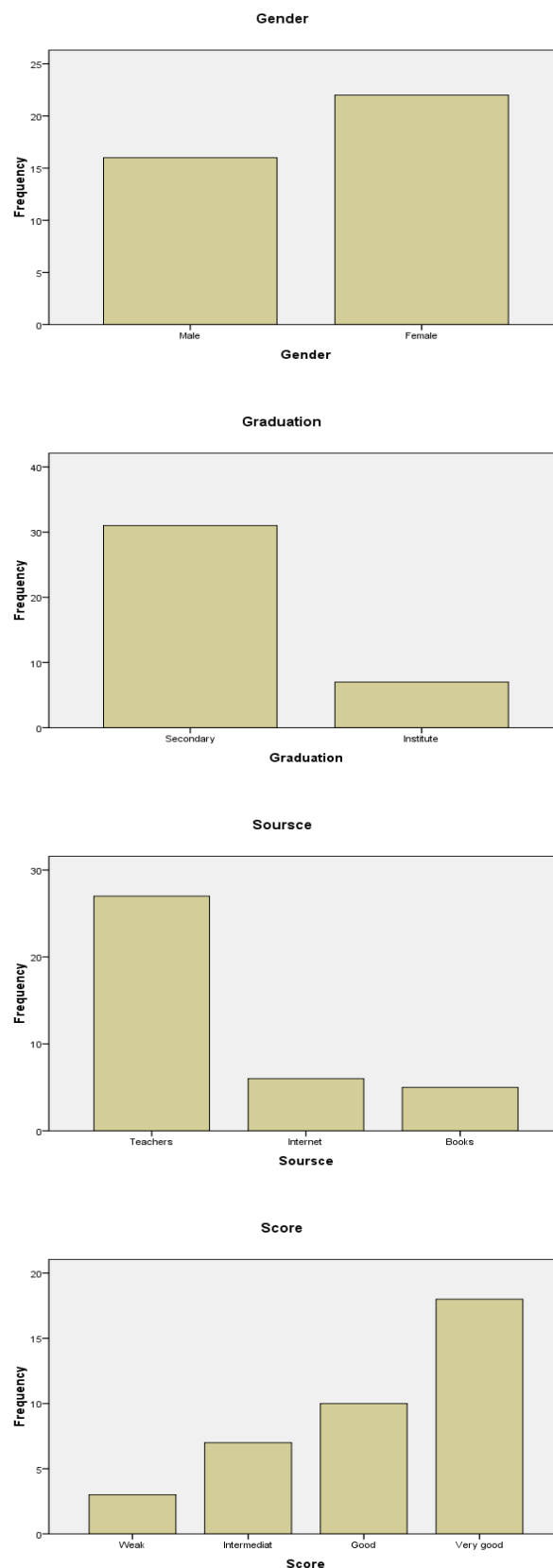


Figure (5): Distribution of the study sample of College of Nursing at Duhok University.

Table (1): Mean of scores and significances (severity) of knowledge items of the study sample (All Colleges).

No	Items	True	Falls	M.S	Severity
1	NANDA is one of Organizations of Nursing in the world to developed nursing process.	154	12	0.92	H
2	NANDA is abbreviation of North American Nursing Diagnosis Association.	155	11	0.93	H
3	1974 is the first Conference Proceedings edited of NANDA by Gebbie and Lavin are published.	27	139	0.16	L
4	Nursing Process is a Systemic method.	130	36	0.78	H
5	Nursing process involves a problem-Solving approach.	130	36	0.78	H
6	Nursing process is a cyclical and ongoing process that can end at any stage if the problem is solved.	88	78	0.53	M
7	Each face of nursing process involves critical thinking.	111	55	0.66	M
8	Each face of nursing process depends on the accuracy of the preceding face,	90	76	0.54	M
9	Nursing process exists for every problem that the individual/family/community has.	97	69	0.58	M
10	Nursing process focuses on ways to improve physical, social and emotional needs.	94	72	0.56	M
11	Nursing process enables the nurse to identify the patient actual and potential problems.	100	66	0.60	M
12	Nursing process consist of five phases.	114	52	0.68	H
13	Assessment is a systematic collection of subjective and objective data.	119	47	0.71	H
14	Subjective data is the verbal statements provided by the patient which include the Cognitive, psychosocial, physical, emotional, cultural, and spiritual components.	111	55	0.66	M
15	Objective data includes observable and measurable signs.	102	64	0.61	M
16	Nursing diagnosis is clinical judgment about individual, family, or community responses to actual or potential health problems.	127	39	0.76	H
17	Nursing diagnosis consist of four components which are, title, definition of the title, contributed factors (etiologic or related factors), and defining characteristics (Manifestation of the problem).	92	74	0.55	M
18	Planning phase of the nursing process is to establish priorities of patient's needs by ranked it.	104	62	0.62	M
19	Implementation phase of nursing process is put plan into action to promote outcome achievement.	105	61	0.63	M
20	Interventions include both nurse-prescribed and physician-prescribed activities.	122	44	0.73	H
21	Evaluation phase is whether the expected patient out-comes and plan is succeeded, realistic and achievable or not?	102	64	0.61	M
22	Documentation is a vital component of the nursing process.	108	58	0.65	M

Table (2): Relationship between Levels of Knowledge and gender of study sample of College of Nursing at Hawler Medical University.

Gender	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Male	3	2	5	5	15
Female	1	8	5	18	32
Total	4	10	10	23	47
χ^2 obs = 46.96 df = 3 χ^2 crit = 7.82 P ≤ 0.05					

Table (3): Relationship between Levels of Knowledge and Graduation of study sample of College of Nursing at Hawler Medical University.

Graduation	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Secondary	4	5	5	14	28
Institute	0	5	5	9	19
Total	4	10	10	23	47
$X^2 \text{ obs} = 42.9$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (4): Relationship between Levels of Knowledge and Sources of information of study sample of College of Nursing at Hawler Medical University.

Sources of information	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Teachers	2	10	6	14	32
Internet	0	0	2	1	3
Books	2	0	2	8	12
Total	4	10	10	23	47
$X^2 \text{ obs} = 46.61$ $df = 6$ $X^2 \text{ crit} = 12.59$ $P \leq 0.05$					

Table (5): Relationship between Levels of Knowledge and gender of study sample of College of Nursing at Slemani University.

Gender	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Male	3	2	1	0	6
Female	20	12	5	2	39
Total	23	14	6	2	45
$X^2 \text{ obs} = 44.97$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (6): Relationship between Levels of Knowledge and Graduation of study sample of College of Nursing at Slemani University.

Graduation	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Secondary	21	14	4	1	40
Institute	2	0	2	1	5
Total	23	14	6	2	45
$X^2 \text{ obs} = 44.92$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (7): Relationship between Levels of Knowledge and Sources of information of study sample of College of Nursing at Slemani University.

Sources of information	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Teachers	17	10	5	2	34
Internet	0	1	1	0	2
Books	6	3	0	0	9
Total	23	14	6	2	45
$X^2 \text{ obs} = 78.22$ $df = 6$ $X^2 \text{ crit} = 12.59$ $P \leq 0.05$					

Table (8): Relationship between Levels of Knowledge and gender of study sample of College of Nursing at Raparin University.

Gender	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Male	2	5	1	0	8
Female	8	16	3	1	28
Total	10	21	4	1	36
$X^2 \text{ obs} = 35.93$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (9): Relationship between Levels of Knowledge and Graduation of study sample of College of Nursing at Raparin University.

Graduation	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Secondary	5	15	3	0	23
Institute	5	6	1	1	13
Total	10	21	4	1	36
$X^2 \text{ obs} = 35.87$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (10): Relationship between Levels of Knowledge and Sources of information of study sample of College of Nursing at Raparin University.

Sources of information	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Teachers	6	8	1	0	15
Internet	2	3	2	0	7
Books	2	10	1	1	14
Total	10	21	4	1	36
$X^2 \text{ obs} = 35.84$ $df = 6$ $X^2 \text{ crit} = 12.59$ $P \leq 0.05$					

Table (11): Relationship between Levels of Knowledge and gender of study sample of College of Nursing at Duhok University.

Gender	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Male	2	3	6	5	16
Female	1	4	4	13	22
Total	3	7	10	18	38
$X^2 \text{ obs} = 37.88$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (12): Relationship between Levels of Knowledge and Graduation of study sample of College of Nursing at Duhok University.

Graduation	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Secondary	3	6	9	13	31
Institute	0	1	1	5	7
Total	3	7	10	18	38
$X^2 \text{ obs} = 37.96$ $df = 3$ $X^2 \text{ crit} = 7.82$ $P \leq 0.05$					

Table (13): Relationship between Levels of Knowledge and Sources of information of study sample of College of Nursing at Duhok University.

Sources of information	Levels of Knowledge				Total
	Weak	Intermediate	Good	Very good	
Teachers	2	6	5	14	27
Internet	0	1	4	1	6
Books	1	0	1	3	5
Total	3	7	10	18	38
$X^2 \text{ obs} = 37.95$ $df = 6$ $X^2 \text{ crit} = 12.59$ $P \leq 0.05$					

DISCUSSION

Table (1) indicates that the mean of scores are high on items (1, 2, 4, 5, 12, 13, 16, and 20) and low significant on item (3) while moderate on the remaining items. Table (2) shows that there is highly significant relationship between levels of knowledge and gender. Table (3) shows that there is highly significant relationship between levels of knowledge and graduation. Table (4) shows that there is highly

significant relationship between levels of knowledge and sources of information. Table (5) shows that there is highly significant relationship between levels of knowledge and gender. Table (6) shows that there is highly significant relationship between levels of knowledge and graduation. Table (7) shows that there is highly significant relationship between levels of knowledge and sources of information. Table (8) shows that there is highly significant

relationship between levels of knowledge and gender. Table (9) shows that there is highly significant relationship between levels of knowledge and graduation. Table (10) shows that there is highly significant relationship between levels of knowledge and sources of information. Table (11) shows that there is highly significant relationship between levels of knowledge and gender. Table (12) shows that there is highly significant relationship between levels of knowledge and graduation. Table (13) shows that there is highly significant relationship between levels of knowledge and sources of information.

Through the data analysis of the present study, the findings of demographic data indicates that the majority of the study sample were female students (72, 89%), graduated from secondary schools (73, 49 %), almost quarter of them have weak level of knowledge only, while the remaining three quarter were very good, good, and intermediate level of knowledge, and the main sources of their knowledge were from their teachers 65.06%, while only 10.84% of them got their knowledge from internet (Fig.1).

From the present findings, the researcher justify that colleges of Nursing in Kurdistan rejoin accept female students who graduate from secondary schools more than male who graduate from institutions. This finding come along with the result of McRae (2003) who stated that from the beginning of the nursing profession, its practitioners are women, female are considered natural caregivers from birth. On the other hand most of the teachers in these colleges have a high certification and high knowledge degree in nursing specialty.

Regarding students of college of nursing at University of Slemani, the majority of students have a low level of knowledge about nursing process according NANDA, the researcher believes that because of most of the teachers are at master degree (Assistant lecturer). While college of nursing at Hawler Medical University came at the first college in rank and college of nursing at University of Duhok in the second, due to high number of teachers with high scientific degree in nursing. In regarding to the students of college of nursing at University of Raparin, the majority of the study sample have a low knowledge about nursing process according NANDA, that is because of their teachers who teach them nursing were surgeons, not specialist nurses and the surgeons have no a lot of information about NANDA in details.

The finding of the present study refers that the majority of the study sample were seemed understood the questions of nursing process good or intermediate understand except the question in item (3) which refers to first Conference Proceedings edited of NANDA (Table 1).

The finding of the present study indicated that there is a highly significant relationship between level of knowledge on nursing process and (Gender, graduation, and source of information) on the tables of chi square.

RECOMMENDATIONS

The study recommended that the teachers of nursing at the colleges and schools in Kurdistan rejoin have to focus on the Conference proceedings edited of (NANDA), farther more nursing process must teach by nursing specialty teachers not physicians.

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