



Graduate Tracer Study of the Faculty of Nursing University of Tripoli, Libya: An Evidenced-Based Information for Curriculum Update and its Implications in Quality Assurance

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ABSTRACT: The Faculty of Nursing ensures the quality of education it provides is suitable to the health needs to meet the demands and challenges of health care in the country. Deemed to produce future nursing leaders and educators, the faculty has undertaken its first graduate tracer study.

Graduate tracer studies obtain both intrinsic and extrinsic results and benefits. Intrinsic results can be used to point at areas for improvement in study programs and service delivery at universities. The study, based on the Commission on Higher Education-adapted survey questionnaire filled in by the Bachelor of Science in Nursing graduates batch 2011-2017. With descriptive-normative research design and snowball sampling technique, smoothed the way for 126 respondents out of 189 graduates. Data showed a predominance of females over males, single over married, mostly within 25-28 years of age. Majority were employed as full time in a government health facility, as well as with satisfaction in their work as a nurse ascribable to monetary remuneration. The job placement rate of the graduates is 65%, filling in the shortage of nurses in Libya. The competency-based curriculum is consistent, aligned and relevant to the nursing job requirements in Libya. Accorded well to the World Health Organization's patient safety curriculum, 'Safe and Quality Nursing Care' competency appraised as the most used in their area of nurse work. Followed by 'communication', 'human relations', 'research', 'problem solving', and 'leadership'. 'Critical thinking' however deemed as least used competency in the care of patients.

The study recommends regular graduates tracking, further curriculum development and policy on educational achievement as one of the criteria for remuneration. Furthermore, researches on topics related to extent of knowledge and application of the learned competencies in nursing education, employability and the employers' preferences on employability of the graduates, job satisfaction and its factors among graduates and competencies used by nurse-employed and non-nurse employed nursing graduates. Lastly, an assessment of the faculty's program and learning is essential for teaching innovations' upgrade and development not to disregard strategies to improve critical thinking abilities and use among nurses in their area of practice. This is to achieve the end goal of this present study, to entrench quality assurance within the faculty from the evidenced-information in distinction to the voice of its graduates.

KEYWORDS: Competencies, Employability, Graduates, Tracer Study

INTRODUCTION

The Faculty of Nursing University of Tripoli, Libya ensures that the quality of education it provides is suitable to the health needs to meet the demands and challenges of health care in the country. Deemed to produce future nursing leaders and educators, the faculty has undertaken its first graduate tracer study. Graduate tracer studies obtain both intrinsic and extrinsic results and benefits. Intrinsic results can be used to point at areas for improvement in study programs and service delivery at universities ⁽¹⁾. The authors embraced this first graduate tracer study (GTS) much for the following reasons: valuable information for the development of the university, evaluate the relevance to higher education, contribute to accreditation process as well as to inform students, parents, lecturers and the administration ⁽²⁾. There are renowned and ongoing graduate tracer studies such as KOAB, REFLEX, INDOTRACE, DEHEMS and CHEERS which purports specific phases with the dissemination of tracer results as the enduring



methodological step declared as very important ^(1,3,4). To infer, the Training on University Graduate Tracer Studies (UNITRACE 2.0, 2016) and the University Council for East Africa (IUCEA), together with German Academic Exchange Service and the Dialogue on Higher Education Strategies ⁽⁵⁾ arranged the:

- Demand for empirical evidence regarding the professional relevance of Higher Education Institutions (HEIs) study programs using graduate tracer studies.
- HEIs require graduate tracer studies (GTS) for accreditation of study programs.
- HEIs interested in feedback from their graduates on the quality of education.

As had already been said, the information, feedback, recommendations and evaluative proposals from this study will be used to entrench a culture of quality assurance. In this regard, the evidenced information from our graduates will focus, refine and provide data. This is an evidence to guide quality culture in the health care system in Libya. The information the graduate nurses provided in the study will improve education and health care. This is to accost that paramount to graduate tracer surveys are the results and their utilization to improve quality of study programs and services for the faculty. To bring benefit, the European Training Foundation (ETF), International Labor Office (ILO) and European Centre for the Development of Vocational Training ⁽⁶⁾, guided the anticipation, matching skills and jobs of graduates thru GTS results. It is not clandestine to everyone that in some parts of Libya, nursing education whether diploma in higher education institution or bachelors' degree in a university are both means to gain employment and earn salary. Prior studies justified that nursing graduates may also be motivated with extrinsic conveniences of real life situations like remuneration. To flip around that perspective so that we can rescind the goal to BSN, FON UOT Libya, we are training graduates to offer competency driven and quality work for services and health development in Libyan soil. Unified on this advantage of GTS, critical measure of success in workplaces is an employee's ability to use competently the knowledge, skills and values that match the needs of his job, satisfy the demands of his employer, and contribute to the overall achievement of institutional goals ⁽⁷⁾. Point at issue is about employability of the BSN graduate nurses of the faculty. Employability as defined by The University of Edinburg, UK is not the same as gaining a graduate job, rather it is about the capacity to function successfully in a role and be able to move between occupations, thus remaining employable throughout their life. This is in light to the main aim of this graduate tracer study, to determine the employment status of the graduates. It also delineates the graduates' satisfaction or dissatisfaction with their work as a nurse. On top of that, usefulness of the learned competencies to gain information on the relevance of the curriculum were hold up to view. These are the: 'safe and quality nursing care', 'communication', 'human relations' (respect for patients, ethico-moral aspects), 'research', 'problem solving', 'critical thinking', and 'leadership'.

METHODOLOGY

To attain the objectives of the study, the descriptive-normative survey design was used as well as snowball sampling technique to facilitate a response rate of 67% or 126 respondents from 189. It is grounded that 30-40% return rate for graduate tracer studies is considered credible owing to high propensity not to trace graduates after they leave the university ^(4,8,9). The survey questionnaire adapted from the Commission on Higher Education ⁽¹⁰⁾ graduate tracer study was the main data gathering tool, slightly modified and standardized for the purpose of the study, checked and approved by research experts. The questionnaire has two parts to show variables of the study. First, socio-demographics as to gender, age, civil status, and area of specialization. Second, takes on employment data, satisfaction or dissatisfaction with working as a nurse and the usefulness of learned competencies in their work as a nurse. Ethical consideration and data gathering procedure were strictly observed. The reliable data bank of graduates from academic year 2011 to 2017 were obtained from the Registrar's office. Data gathering started during the last week of January 2020 to end of February. The study has some limitations. First, the respondents was confined to reachable graduates only after reinforced means like personal or face to face invitations to interviews, a web page built for this purpose, telephone calls and reminders, emails and social media were undertaken. Graduates' nursing job placement rate was identified excluding the employment rate.

RESULTS AND DISCUSSION

Table 1 presents that most of the respondents were young adults belonging to age group of 25 to 28 years old, majority were females, most remain single. For years, nursing is known to be a female dominated profession. Although at present, opportunities for



employment are equally enjoyed by both male and female nurses, female nurses still occupy a greater portion of nursing positions (11).

Table 1. Profile of the graduates (*n*=126)

A. GENDER	FREQUENCY	%
Female	83	65.88
Male	43	34.12
<i>Total</i>	<i>126</i>	<i>100</i>
B. CIVIL STATUS		
Single	72	57.14
Married	51	40.47
Divorced	2	1.58
Widow	1	0.79
<i>Total</i>	<i>126</i>	<i>100</i>
C. AGE		
25-28 years old	73	57.95
29-32 years old	48	38.09
33-35 years old	5	3.96
<i>Total</i>	<i>126</i>	<i>100</i>

Table 2 indicates the employment status of the graduates as well as their job placement. Majority, 82 or 65% were Full time employed as a nurse while more than a third, 44 or 35% were not. This goes to say that 65% are presently employed in nursing career for which they were trained, filling the nursing shortage in Libyan healthcare. All respondents were employed after graduation represented by 0 or 0% for never employed. Similar result derived from a study in Malta, one-third of graduate participants were not engaged in any employment at the time of survey’ (12). In any event, it is apparent that employment status among graduates were due to the fact that being Libyans: being a married woman, being a woman and far from the workplace, having no relatives or friends in workplace to monitor the treatment and relationships within the workplace and being not amenable to night shift among others. Violative to the nursing shortage, some nursing graduates are found working in computer and technical jobs with high salaries, in police work, business owners or managers, attending family businesses, pharmacies and many others.

Table 2: Employment status of the graduates as to working as nurse or not

Employment status	Frequency	%
Employed as a nurse	82	65
Fulltime	81	98.78
Part time	1	1.22
Not employed as a nurse	44	35
Never employed	0	0
<i>Total</i>	<i>126</i>	<i>100%</i>

Table 3 illuminates the aggregated data in table 2, 29 or 35% of the Full time nurses (*n*=81) were having part-time jobs as nurses in another health facility. Part time jobs as defined by other authors as nurse’s dual practice, were largely ‘hidden’ element in nursing workforce policy and practice, with an unclear impact on the delivery of care (13). Mounting evidence suggests that holding multiple concurrent jobs (dual practice) is common among health workers in low- as well as high-income countries.

Per interview, graduate nurses of the FON verbalized the need to increase personal over-all earnings to meet the demands of having a car and a home before marriage, with a couple of them: to support their families. This can be attributed to the fact that, ‘one of the main problems in Libya is the poor job satisfaction among medical staff and employees working in government hospitals, due to many reasons such as bureaucratic obstacles and low salaries and incentives’ (19).



Table 3. Part-time or Full-time status of the graduates employed as Nurse (n=81)

Status of Full Time working Nurses	Frequency	%
Full Time with Part-time job as a nurse	29	35.80
Full Time with no part time job	52	64.2
<i>Total</i>	<i>81</i>	<i>100%</i>

Table 4 defends the 44 or 35% of the total respondents who were not employed as a nurse during the data collection: ‘having a different job’ (21%), ‘further studies’ (11%) while majority gave ‘Other reasons’. It is observed, graduates who were not working as nurses concealed reasons of not working as a nurse. None of them chose ‘health and family reasons’, ‘having a different job’, ‘did not look for a nurse job’ to ‘don’t like to work as a nurse’. Dissimilar result from a study disclosed that ‘unemployed nurses in the Philippines have the following reasons: family concerns, a decision not to search for a job or pursuing an advanced or future studies’ ⁽¹⁴⁾.

Table 4. Reasons of not being employed as a nurse (n=44)

Reasons of not working as a nurse	Frequency	%
Other reasons (not specified)	30	69
Having a different job	9	20
Further studies	5	11
Health and family reasons	0	0
Have a different job	0	0
Did not look for a job as a nurse	0	0
Don’t like to work as a nurse	0	0
<i>Total</i>	<i>44</i>	<i>100%</i>

Table 5 exhibits the type of institution the 82 employed nurses are working with, as to government or private facility. Fifty-seven (57) or 69.5% of the respondents were working at a government run facility while 25 or 30.5% were employed at a private health facility. In agreement to this finding is a result from a medical survey of the National Health Workforce Data from the Department of Health of the Australian government: public sector positions offer enviable job security, support resources for employees who are experiencing professional and performance issues ⁽¹⁵⁾. As observed, Libyan government personnel and staff are supportive in terms of schedule preferences of its local nurses regarding part time jobs for economic purposes as well as maintaining schooling for further studies.

Nevertheless, some Libyan private health facilities pay better than most of the government hospitals in the country which serves the 30% of the graduates.

Table 5: Type of Institution they are employed (n=82)

Place of employment	Frequency	%
Government	57	69.50
Private	25	30.50
<i>Total</i>	<i>82</i>	<i>100%</i>

Table 6 gives way to the respondents' answer when asked if they are satisfied in working as a nurse. Seventy-two (72) or 87.82% out of eighty-two answered ‘Yes’, noteworthy that the BSN graduates were satisfied despite being in a demanding job. The rest of the respondents four or 4.87% and six or 7.31% remained ‘not’ or ‘no answer’. In this case, there is a need to establish necessary attention to ‘increase nurses' job satisfaction to increase patient safety and quality of care, decrease nursing absenteeism and turnover, and positively influence the health of nurses’ ⁽¹⁶⁾.



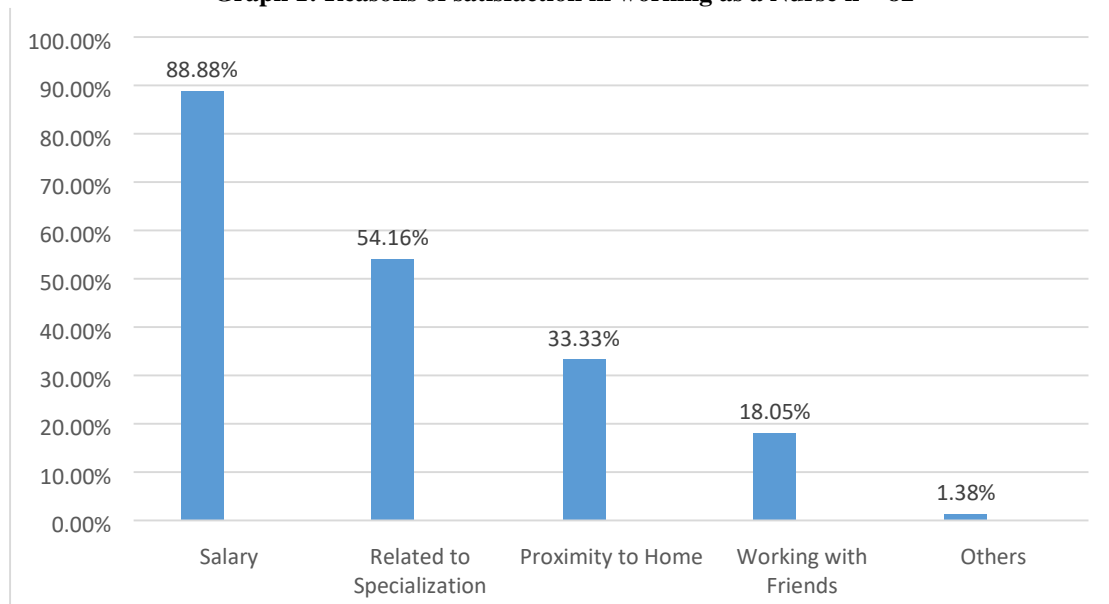
Table 6: Satisfaction in working as a nurse (n=82)

Satisfaction criteria	Frequency	%
Yes	72	87.82
No	4	4.87
No answer	6	7.31
Total	82	100

Graph 1 justifies the satisfaction of the graduates in working as a nurse (n=82). The highest reason of satisfaction among others: sixty-four (64) or 88.88% for salary they obtain. Data is in contrast with the study in Malta: ‘salary level and opportunities for promotion were of lowest levels of satisfaction among graduates’ ⁽¹²⁾.

Second reason of satisfaction in working as a nurse among Libyan graduates is ‘working in their area of specialization’ (39 or 54.16%), followed by ‘proximity of the work place to their home’ (24 or 33.33%), then ‘working with friends’ (13 or 18.05%). One study consented that among their nursing graduates who landed jobs, majority were just satisfied with their current employment condition as nurses. While others indicated that they were highly satisfied ⁽¹⁷⁾. A notable data from another nursing schools’ GTS, most of the graduates stayed as practicing nurses because of its relatedness to the nursing profession. Some found the job challenging while only but a few responded as due to compensation and benefits received ⁽¹⁸⁾.

Graph 1: Reasons of satisfaction in working as a Nurse n = 82



Graph 2 elucidates the collective data from table 6: ‘Low salary’, ‘workplace far from home’, ‘having no friends at work’ and ‘others’ were the reasons of dissatisfaction. Getting a salary that is not enough for the daily needs is an ordinary reason for job dissatisfaction. A result of one study precludes justice to this phenomenon: ‘employees and medical staff of Tripoli hospital are generally not satisfied with all factors (work comfort, work treatment, salary, incentives) affecting job satisfaction which leads to low performance of the said hospital, cause patients to look for hospital care outside Libya’ ⁽¹⁹⁾.

It is generally agreed that education pays. Higher education is associated with increased productive capacity and, provided there is equal access, is often considered a fair and objective way of allotting people to different positions in the labor market and in society on the basis of individual achievement ⁽²⁰⁾. Still and all, it is transparently obvious that Bachelor of Science in Nursing and Diploma Nursing graduates alike have the same salary prevailing in some institutions. However, some of both public and



private-owned health facilities, were excluded in this operation, which makes them a good avenue for employment of BSN graduates.

Graph 2: Reasons for the feeling of dissatisfaction in their nursing job (n=10)

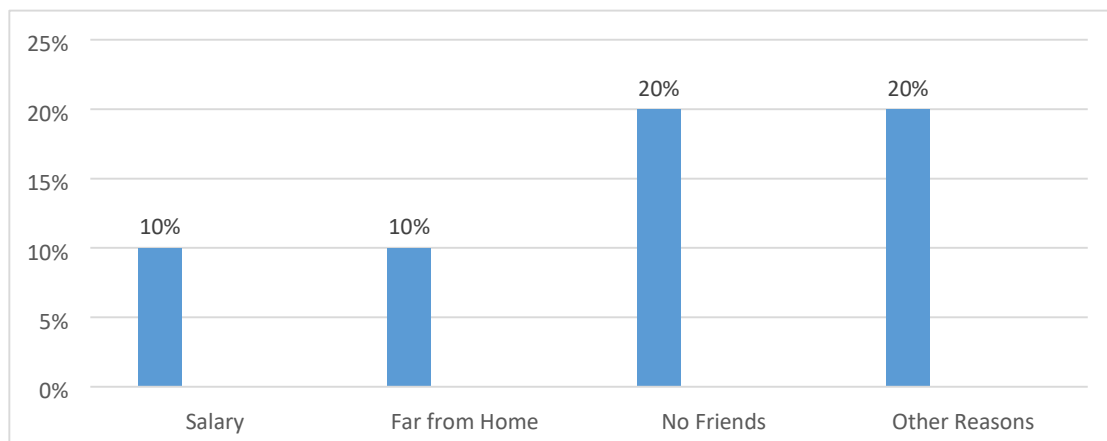


Table 7 presents the relevance and usefulness of the learned competencies of the graduates of FON UOT in their nursing job. Taken away from graduates employed as nurses (n=82), majority signified that learned skills and competencies are useful in their job as a nurse. Among the list, the provision of ‘Safe and Quality Nursing Care to patients’ appeared to be the most useful. ‘Communication’ and ‘Human Relations’ were ranked second and third, respectively. Almost in agreement with a study conducted on graduates of teacher education, majority of respondents implied ‘communication skills’ and ‘human relations skills’ were most useful in their job ⁽²¹⁾. Statistics major graduates said that to have good communication skill by way of the study field is an essential competence in their field of work ⁽²²⁾. Resonance from the distance education graduates in Malaysia, ‘Communication skills’ rated with highest satisfaction, exhibited as the most improved item among other competencies ⁽²³⁾. A reverberation from nursing graduates in the Philippines, among the competencies identified necessary for nursing work, human relational skills achieved the highest rating. This means that development of positive interpersonal relationship must be given emphasis throughout the curriculum. The development of the right attitude towards patients, significant others, members of the health team, and even peers must receive proper attention as this is necessary in building good human relationships ⁽¹¹⁾. Undeniably, ‘communication skills’ as a competency is inherent not only in nursing curriculum, proved necessary for teaching and learning too. Higher education adds value by developing job-related skills and competencies that prepare students for the workplace ⁽²³⁾. To supplement this claim, a study result posits ‘when graduates stay in their job for economic reason, they rationalize that communication skills and human relation skills as part of their education preparation is very relevant to their jobs’ ⁽²⁴⁾. The rest of the competencies inherent in the Nursing curriculum of the Faculty of Nursing UOT like ‘Research’, ‘Problem Solving’, and ‘Leadership’, were also appraised as useful by the respondents. Surprisingly, ‘Critical thinking’ sorted as the least useful among the competencies in the workplace.

This goes to say that the curriculum of the FON UOT is consistent, aligned and relevant to nursing job requirements in Libya. The faculty members prepared graduate nurses with competencies as well as knowledge, skills and attitudes needed in everyday dealing with patients. The study gives broach to the fact, showed in the results section that seriously, graduates of 2011-2017 gain competencies in their nursing field of discipline in FON UOT, and that the faculty contribute surpassingly to mold graduates, these core competencies. The most remarkable of all, graduates themselves articulated that these knowledge-based competences are useful in their work, on the very Libyan job scene. In a study of nursing graduates working as nurse practitioners, majority believe that the program they pursued is very much aligned and relevant with their present jobs. According to them, the college has prepared them per their expectations, not only with the competencies but with the values that are needed in their everyday dealings with their patients ⁽¹¹⁾. For the authors, these demonstrates that what the FON UOT are teaching BSN graduates in, is



relevant to the nursing qualifications contrary to our foregoing observations and interviews to some students and graduates who in no way consider nursing job or nursing service work as the momentous motivation for passing their BSN course. Instead, rationalization goes like ‘engaged already’, ‘working as police/officer already’, ‘business managers already’ who simply need certificate’, ‘the course is the only open course offered and like something else’, apart from the fact that their parents knew they are on another course like anesthesia and medical technology. Therefore, if the competencies graduates gained from the curriculum only aid them to obtain certificates for display and self-presentation, not to mention promotion in their non-nursing job, ‘there is a need to re-orient graduates’ mind sets to focus on application and use of competencies at work for development of service provision’⁽⁹⁾. Anyhow, results in this study shown high relevance of study competencies to nursing work employment. This reverberates ‘that there is a profound link between competencies acquired during university study and that universities contribution to acquisition of these competencies by graduates and furthermore, graduates utilize the competencies during work’^(8,9).

Table 7. Relevance of learned competencies in their job

Rank	Competencies
1	Safe and Quality Nursing Care
2	Communication
3	Human Relations: Respect for patients, Ethico-Moral aspects)
4	Research skills
5	Problem Solving
6	Leadership
7	Critical Thinking

Safe and Quality Nursing Care to patients as the predominantly useful in the nursing jobs of the BSN 2011-2017 graduates of FON is accorded well to the WHO patient safety curriculum guide to medical schools⁽²⁵⁾. Since the beginning of the faculty in 2009, the nurse educators implemented the WHO guided curriculum which have prevailed until recently notwithstanding updates every five-year terms. This reflect realization of the different needs as well as changes in the Libyan health care system.

Patient safety curriculum topics as well as quality nursing care are incorporated in the major nursing subjects commencing from first semester until the last semester of the degree. ‘Communication’ and communication technique is the overriding objective of the subjects Mental Health Nursing and Psychology. Human relations as the supreme aim of Nursing Ethics and Leadership subject have a prominent place in ethical decision making for patients. Not to mention the nurses’ code of ethics learned, the nurses will be able to handle as well as avoid ethical delimitas then serve as role models in the nursing workplace among other degrees of nursing in Libya. ‘Research’ helps nurses determine effective best practices and improve patient care. The primary motive for engaging with research-based information by nurses can be argued, is to reduce clinical uncertainty and locating relevant research that will increase the individual’s certainty that a particular course of action is most likely to lead to the desired outcomes⁽²⁵⁾. The American Association of Colleges and Nursing Quality and Safety Education for Nurses (AACN, QIPSE), World Health Organization (WHO) and diagnosis quality and safety emphasized teaching approaches and examples in nursing curricula, should strive to be meaningful to students and have clear relevance to the workplace in order to be effective⁽²⁶⁾.

The graduates revealed that in working as a nurse, the least used knowledgebased competency is the ‘critical thinking’. This situation is ruled out as ‘there is a substantial body of evidence to show that tasks, ward routines and rituals and procedures, socialization of neophytes in nursing are strong obstacles to use of critical thinking skills in nursing’⁽²⁷⁾. Although it is a disposition to critically think as well as use the critical thinking skills to define patient problems accurately, nursing education has still a bigger portion to mold graduates into critical thinkers. Appraising the critical thinking competencies in nursing education is a complex task as it involves procedures and strategies that require considerable information like the patient cases the graduates handled in their area of work. Critical thinking is an essential process for the safe, efficient and skillful nursing practice. The nursing education programs should adopt attitudes that promote critical thinking and mobilize the skills of critical reasoning⁽²⁸⁾. Although critical thinking is a highly valuable skill that has been widely studied, much more must be done in clinical practice, education and research



to develop and strengthen critical thinking in these settings⁽²⁹⁾. This in turn will help ensure that nursing care has at its center improving people's health and influencing healthcare systems and policies.

CONCLUSIONS

Majority of the graduates of the Faculty of Nursing 2011-2017 were females with age ranging from 25-35, mostly single. Most of them employed as nurses, classified into working as full time, and part time. Most of the full timer nurses have part time jobs as nurses while others remained. Both are satisfied with their work owing to salary they come by, working on their area of specialization and their place of work is near their homes. The job placement rate of the graduates is 65%, filling in the shortage of nurses in Libya. The competency-based curriculum of the FON UOT is consistent, aligned and relevant to the nursing job requirements in Libya. Accorded well to the WHO patient safety curriculum, 'Safe and Quality Nursing Care' competency appraised as the most used in their area of nurse work. Followed by 'Communication', 'Human Relations', 'Research', 'Problem solving', and 'Leadership'. 'Critical Thinking' however deemed as least used competency in the care of patients.

RECOMMENDATIONS

Regular graduates tracking to make sure that courses offered including clinical experiences are consistent, aligned with competency-based curriculum, updated and relevant to the constant changing demands of health care.

Curriculum development must include increase in critical thinking skills for the graduates to address and critique the current understanding of health and nursing, particularly patient care.

Policy makers may consider an educational achievement a standard for payment as well as provision of rewards and promotion for motivation.

Yearly graduate tracer study and a more comprehensive graduate tracer study be employed to include all graduates of the Faculty of Nursing for evidenced-based information and practice in their work as nurses in Libya. Suggestions mainly on topics related to extent of knowledge and application of the learned competencies in nursing education, employability and the employers' preferences on employability of the FON UOT BSN graduates, job satisfaction and its factors among graduates, competencies used by nurse-employed and non-nurse employed nursing graduates, and their means of landing a job to reflect the culture of employability. Lastly, an assessment of the faculty's program and learning is essential for teaching innovations' upgrade and development not to disregard strategies to improve critical thinking abilities and use among nurses in their area of practice.

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