

PERCEPTION AND ATTITUDE OF NIGERIAN SCHOOL CHILDREN TOWARDS RADIOGRAPHY PROFESSION

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ABSTRACT

BACKGROUND: Shortage of manpower is a worldwide problem in radiography and is attributable to the negative perception of the profession by young people.

AIM: To assess the level of awareness, perception and attitude of young Nigerian school children towards radiography profession and determine the effect of career talk on their perception and attitude towards it.

METHODOLOGY: A two-group study which targeted final-year science-inclined students of four selected secondary schools was conducted. The respondents numbering 395 were divided into two groups; 1 and 2. Group 1 received detailed career talk on radiography while group 2 did not. The data collection instrument was a 26-item semi-structured self-completion questionnaire designed to elicit the awareness level, perception and attitude of the two groups towards radiography profession.

RESULTS: The awareness level of the respondents about radiography profession was 76.6%. Respondents in both groups did not have in-depth knowledge of radiography. Only 42.6% (n = 101) respondents in group 1 may take up radiography as a career compared to 14.6% (n = 23) in group 2. Only 0.8% (n = 2) respondents in group 1 chose radiography as their ideal career while none chose it in group 2. The perception and attitude of the two groups towards radiography profession were moderately positive. There were significant differences in the perceptions of

various attributes of radiography profession and radiographers between the two groups ($P < 0.05$). The respondents who received career talk were more willing to take up radiography as a career than those who did not receive career talk.

CONCLUSION: Young Nigerian school children's awareness about radiography profession is generally encouraging but they lack in-depth knowledge of the profession to make informed choice. Their perception of the profession and attitude towards it is negative and can be improved by career talk.

KEYWORDS: Radiography profession - Awareness -Attitude ·Perception

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INTRODUCTION

Radiography is a very important arm of modern medical practice and has long been recognized in many countries as one of the professions allied to medicine. A decree was promulgated by the military government in Nigeria in 1978 to regulate the activities of some professionals in public service that included Radiography¹. In 1987, decree No. 42 was promulgated which accorded radiography full professional status like medicine, midwifery, nursing, pharmacy, and law¹.

Radiography is a profession traditionally concerned with creating x ray images of patients for purposes of diagnoses (diagnostic radiography) and treatment of tumors using various types of ionizing radiations (therapy radiography). With rapid advances in technology, vastly improved training and education, the scope of radiography has in the past two decades or thereabouts expanded in many countries. The role of radiographers has changed significantly as the demand for radiography services has increased markedly and the work also become more complex². The competence of radiographers now covers other medical imaging modalities such as computed tomography, magnetic resonance imaging, ultrasonography, nuclear medicine, and thermography. The expanding frontiers of radiography practice have ensured that the role of radiographers does not stop at obtaining diagnostic images but also include making useful clinical interpretation of the images. Despite being a profession in upward swing radiography is failing to attract young Nigerian school children to make career in it. This can be deduced from the number of radiographers registered to practice the profession in Nigeria as published by the regulatory authority. According to the Radiographers Registration Board of Nigeria (RRBN)³ publication on the registered radiographers in Nigeria updated on the 22nd August, 2011, only 1,058 radiographers are registered to practice radiography in Nigeria. This number includes those who registered and migrated abroad for greener pastures, and those who might have died. Nigeria is a very populous country with about a hundred and fifty million people and radiography services are provided by this small number of radiographers.

The perceived unattractiveness of radiography to young Nigerians may be the result of low level of awareness about the profession, and negative attitude and perception occasioned by inadequate knowledge of the profession by Nigerians.

The aim of this study was to assess the level of awareness, perception and attitude of young prospective Nigerian school children towards radiography profession and to determine the effect of career talk on their perception and attitude towards the profession.

LITERATURE REVIEW

Although there is paucity of local literature on awareness, perceptions and attitudes of school children towards medical radiography, the problem of acute shortage of radiographers is well recognized.

Eze et al⁴. identified some attractors and detractors of radiography as a career. The attractors include readily available job opportunities, extension of radiography career ladder, role extension, introduction of internship program for fresh radiography graduates, technological advancements and opportunity for self employment. The investigators highlighted job opportunities both within and outside the country as the most important attractor, since no radiographer who wishes to practice in Nigeria is unemployed. The identified detractors include poor societal recognition of radiography, lack of professional title and radiation hazard. Radiation hazard was rated as the highest detractor. Poor societal recognition of radiographers could be due to poor professional image of radiography, a problem identified in an earlier study⁵. Career choice is influenced by both psychological and social factors. This is reflected in the way an individual perceives a prospective career. In a study to compare the perceptions of an ideal career with perceptions six other health careers, all the six health professions were perceived as significantly less desirable than the ideal career in the areas of "being respected" and "working with high technology." "Care for people" was found to be the third highest ranked attribute of an ideal career, and pharmacy and radiation technology (radiography) were found to be significantly

lower in this area⁶. Job security was another attribute of ideal career investigated and only nursing was perceived as having job security that matched the ideal career, with other professions perceived as offering significantly less job security than the ideal profession⁶.

Information available to young people about a profession to a very large extent influence their perception of the profession and attitude towards it. Poor quantity and quality of information about a profession could instigate negative perception and attitude by young people. A study had reported that the quantity and quality of information on internet websites about the career of radiography was not of satisfactory standard and more attention from both the government and professional bodies is needed if the profession is to gain attention, and the staff shortage problem is to be solved⁷. It will be an understatement to say that inadequate information on radiography or information which lack quality on the net affect the profession negatively and the advice of the researchers should be taken very seriously to ensure that the profession grows in an expected way. Another study reported University of Salford's website as coming tops in terms of information content on radiography⁸. The study evaluated many other websites. Although these websites on radiography exist, the problem still remains that very few Nigerian secondary school students have adequate knowledge of computer, and have access to one and know how to search the web.

Radiography is not the only health profession facing this negative attitude and perception from youngsters. A study of attitudes of Hong Kong high school students towards the nursing profession reported that students were generally knowledgeable about nursing but were reluctant to pursue nursing as a career. However, students who were socially acquainted with nurses demonstrated a slightly more positive attitude towards nursing and slightly higher intention to pursue nursing career compared to those who have no social acquaintance with nurses⁹. The way an individual feels about a profession seems to play an important part in the selection of a profession as a career¹⁰.

From the reviewed literature, certain things can be deduced, and their importance to the progress of radiography profession cannot be underestimated. These include improving on the attractors of this profession, reducing or eliminating those things that detract young people from taking up this career, publishing more articles about the profession on the internet and creating more awareness about the profession to the young people who possibly could take to this profession in the future.

RESEARCH METHODS

A two-group design was adopted for this study. The target population was the students in the senior secondary school final year class. The students were those offering science subjects and are thought to be likely to take to science and technology based careers. A convenience sample of 395 students from four selected secondary schools in Anambra state, Nigeria were enlisted into the study. This comprised 201 males and 194 females. They were divided two groups. Group 1 was made up of students of Saint Charles' Special Science School, Onitsha and Special Science School, Abagana who received detailed career talk on radiography profession. Group 2, was made up students of Lorreto Special Science School, Adazi-Nnukwu and Merchant of Light Special Science School, Oba. This group did not receive any career on radiography profession.

Prior to commencement of data collection, permission was sought and obtained from the principals of the four schools involved in the study for us to speak to their students and administer questionnaires. The purpose of the study was clearly explained to the principals and approvals to carry out the study were given verbally. The data collection instrument was a semi-structured 26-item self-completion questionnaire which is a modified adaptation of the questionnaire used in the study of Palumbo et al⁶. (see appendix). The modification was done to suit the objectives of the present study. The questionnaire was divided into three parts. The first part consisted of questions on the socio-demographic characteristics of the respondents.

The second part contained questions about the respondents' level of awareness about radiography profession. The third part consisted of questions to assess the respondents' perception and attitude towards radiography profession. Items 11 and 12 were on ordinal scale, item 13 open-ended, while items 14 to 25 were on Likert scale. Items 14 to 25 were to assess the magnitude and direction of the respondents' attitude and perception of radiography profession. The responses from the students were graded numerically as "Strongly Agree = 5", "Agree = 4", "Uncertain = 3", "Disagree = 2" and "Strongly Disagree = 1". Item 26 was a visual analogue scale (VAS) to rate the overall attitudes of the students towards the profession. Group 1, received a well detailed career talk which bordered on every aspect of the radiography profession. The resource persons for the career talk were lecturers in the Radiography Department, Faculty of Health Science and Technology of Nnamdi Azikiwe University, Nnewi Campus and some practising radiographers from Nnamdi Azikiwe University Teaching Hospital, Nnewi. After the career talk, the students were given a period of between two and four weeks to think about the career talk, discuss and digest what they have

heard about radiography profession before the questionnaire was administered to them. For group 2, no career talk was given in order to assess how much of this profession that they already know. The questionnaire was distributed with instruction that items 14 - 26 should not be filled out by students who have not heard about radiography. The questionnaire was administered to the students by direct issuance and privacy of the students was maintained by ensuring that names were not included in the questionnaire and no identification marks were tagged to individual students except it was A or B to identify the location.

The data collected were analyzed using Statistical Package for Social Sciences version (SPSS) 14.0. Descriptive and inferential statistics were carried out. Statistical significance was considered at $p < 0.05$.

RESULTS

The respondents evaluated in the study were 395 students in four selected Special Science Schools in Anambra State, Nigeria. They comprised of 50.9% (n = 201) males and 49.1% (n = 194) females divided into two groups as shown in table

Table 1: Distribution of the students across the schools

Group 1: Received Career Talk			TOTAL
SCHOOL	MALE	FEMALE	
St. Charles' Special Science School, Onitsha.	153 (64%)		237
Special Science School, Abagana		84 (35%)	
Group 2: Did not received career talk			158
Merchant of Light Special Science School, Oba	48 (30.4%)		
Loretto Special Science School, Adazi-Nnukwu		110 (69%)	
	201 (50.9%)	194 (49.1%)	

The respondents were aged between 14 and 19 years (mean 16.9 ± 1.1 years) for group 1; and between 15 and 20 years (mean 17.1 ± 0.9 years)

for group 2. The respondents' parents' formal educational qualification is as shown in table 2.

Table 2: Parents' highest formal educational qualifications

Qualification	Group 1	Group 2
Ph. D or equivalent	8.9% (n = 21)	12.7% (n = 20)
Master's degree	5.5% (n = 13)	9.5% (n = 15)
Bachelor's degree	52.3% (n = 124)	48.1% (n = 76)
O' level	26.6% (n = 63)	25.9% (n = 41)
First School Leaving Certificate	4.2% (n = 10)	2.5% (n = 4)
No formal education	0.4% (n = 1)	0% (n = 0)
No response	2.1 % (n = 5)	1.3% (n = 2)
Total	100% (n = 237)	100% (n = 158)

The predominant parents' occupational groups for group 1 were private business (38.4%, n = 91) and teaching (24.1 %, n = 57). For group 2, the predominant parents' occupational groups were

private business (32.9%, n = 52), teaching (24.1 %, n = 38) and civil service (13.3%, n = 21). The respondents' role models' occupational groups are shown in table 3.

Table 3: Respondents' role models' occupational groups

Occupational Group	Group 1	Group 2
Accountancy		0.6% (n = 1)
Agriculture		0.6% (n = 1)
Athletics	1.7% (n= 4)	1.3% (n = 2)
Banking	0.4%(n= 1)	0.6% (n = 1)
Business	1.7% (n = 4)	1.3% (n = 2)
Civil Service		0.6% (n = 1)
Economics	1.3% (n = 3)	0.6% (n = 1)
Engineering	22.0% (n = 52)	5.7% (n = 9)
Entertainment	0.4% (n = 1)	3.2% (n = 5)
Geology & Mining	0.8% (n = 2)	0.6% (n = 1)
Information technology	1.7% (n =4)	0.6% (n = 1)
Laboratory medicine		1.9% (n = 3)
Medicine	34.6% (n = 82)	34.2% (n = 54)
Nursing	5.9% (n = 14)	4.4% (n = 7)
Pharmacy	13.5% (n = 22)	7.0%(n = 11)
Physiotherapy		1.3% (n = 2)
Politics	2.1% (n = 5)	0.6%(n = 1)
Priesthood	1.7% (n = 4)	0.6%(n = 1)
Natural science	1.7% (n = 4)	1.9%(n = 3)
Undergraduate students		20.9%(n = 33)
Teaching	1.7% (n = 4)	5.1 %(n = 8)
Architecture	0.4% (n = 1)	
Aviation	0.4% (n = 1)	
Script writing	0.4% (n = 1)	
Radiography	5.5% (n = 13)	
Military	0.4% (n = 1)	
No role model	1.7% (n = 4)	6.3%(n = 10)
Total	100% (n = 237)	100% (n = 158)

From the table, the predominant occupation of the respondents' role models are medicine, 34.6% (n = 82), engineering, 22% (n = 52) and pharmacy, 13.5% (n = 22) for group 1 and medicine, 34.2% (n = 54), undergraduate students studying various courses, 20.9% (n = 33) and pharmacy, 7.0% (n = 11) for group 2.

The level of awareness about radiography profession was assessed by considering the response of the students in group 2; that is those who did not receive career talk on radiography. The respondents' level of awareness is shown in table 4.

Table 4: Respondents' level of awareness about radiography

Awareness status	No. of Respondents
Aware	121 (76.6%)
Unaware	37 (23.4%)
Total	158 (100%)

Majority of the respondents in group 2 heard about radiography just about a year ago (83.3%, n = 130). However, for group 1, 94.1 % (n = 223) heard about radiography in the past one year. The

source of knowledge and awareness about radiography profession for the two groups is as shown in table 5.

Table 5: Sources of respondents' knowledge and awareness of radiography profession

Sources	Group 1	Group 2	Remarks
Career talk	52.3% (n = 124)	41.1 % (n = 65)	P = 0.03*
Media	3.4% (n = 8)	5.1% (n = 8)	P = 0.40
Radiographers they met	37.1% (n = 88)	3.8% (n = 6)	P = 0.00*
Others: E.g. Physics lessons	6.8% (n = 16)	25.9% (n = 41)	P = 0.00*
No response	0.4% (n = 1)	24.1 % (n = 38)	P = 0.00*
Total	100% (n = 237)	100% (n = 158)	

The test of knowledge about radiography profession for the two groups is shown in table 6.

Table 6: Test of knowledge about radiography profession

Knowledge	Group 1	Group 2	Remarks
Correct	4.6% (n = 11)	1.3% (n = 2)	P = 0.07
Incorrect	95.4% (n = 126)	98.7% (n = 156)	P = 0.07
Total	100% (n = 137)	100% (n = 158)	

For group 1, 85.7% (n = 203) consider radiography a good career but only 42.6% = 101 think they may take it up eventually. For group 2, 74.4% (n = 118) think it is a good career but only

14.6% (n = 23) think they may eventually take it up. The respondents' ideal career choices are shown in table 7.

Table 7: Respondents' Ideal Career

Ideal Career	Group 1	Group 2
Architecture	0.4% (n=1)	
Banking	0.4% (n=1)	
Biochemistry	0.8% (n=2)	0.6% (n=1)
Economics	0.4% (n=1)	
Engineering	20.3% (n=48)	10.8 (n=17)
Geology	1.3% (n=3)	1.9% (n=3)
Information technology	0.4% (n=1)	1.9% (n=3)
Law	0.4% (n=1)	
Medicine	19.0% (n=45)	31.0% (n=49)
Microbiology	0.8% (n=2)	1.9% (n=3)
No career choice yet	41.4% (n=98)	19.0% (n=30)
Nursing	5.1 % (n=12)	9.5% (n=15)
Pharmacy	5.9% (n=14)	16.5% (n=26)
Physiology	0.4% (n=1)	
Physiotherapy	0.4% (n=1)	2.5% (n=4)
Aviation	0.4% (n=1)	
Politics	0.4% (n=1)	-----
Priesthood	0.8% (n=2)	
Radiography	0.8% (n=2)	
Teaching		0.6% (n=1)
Agriculture		0.6% (n=1)
Laboratory medicine		2.5% (n=5)
Total	100% (n = 237)	100% (n = 158)

The perception of the students about various attributes of radiography profession and radiographers are shown in table 8.

Table 8: Perceptions of the respondents

Attributes	Perception rating Group 1	Perception rating Group 1	Remarks
Radiography is humanitarian	4.35 ± 0.93	3.80 ± 0.93	P = 0.000*
Radiographers are highly respected	4.22 ± 0.81	3.52 ± 0.96	P = 0.000*
Radiography is invaluable III modern medical practice	4.31 ± 0.98	3.63 ± 1.15	P = 0.000*
Radiographers are brilliant	4.33 ± 0.87	4.09 ± 0.97	P = 0.000*
Radiographers work with hi-tech equipments	4.66 ± 0.70	4.31 ± 0.96	P = 0.000*
Radiographers can get to the peak of academics	4.49 ± 0.73	4.30 ± 0.93	P = 0.000*
Radiographers are well paid	4.45 ± 0.81	3.86 ± 0.92	P = 0.000*
Radiographers can attain the highest level in their profession	4.12 ± 0.97	3.32 ± 0.96	P = 0.000*
Radiographers can become specialists III many areas of their profession	4.49 ± 0.67	4.17 ± 0.94	P = 0.000*
Radiographers do not experience unemployment	3.92 ± 1.15	3.12 ± 1.08	P = 0.000*
Radiographers are well shielded against radiation at work place	4.09 ± 0.94	3.70 ± 1.14	P = 0.000*
Radiographers make decisions about their work independently	3.79 ± 1.10	3.10 ± 1.00	P = 0.000*

On a visual analogue scale, the respondents rated their overall willingness to take up radiography profession as shown in table 9.

Table 9: Respondents overall willingness to take up radiography career

	Rating	Remarks
Group 1	6.43 ± 3.09	P = 0.000*
Group 2	4.46 ± 2.64	

DISCUSSION

Acute shortage of radiographers is a world-wide problem in the health care sector and ways to eliminate it have been suggested but much has not been said about awareness of secondary school students about this profession, even though they are potential new entrants into radiography. The attitudes and perceptions of these youngsters have not been assessed to know those things that

possibly deter them from taking up this profession. Ascertaining their perception of various attributes of radiography profession and radiographers will help in identifying the aspects of radiography career that are positively or negatively perceived. This information will be useful to career guidance counselors in shaping the thoughts of these young people positively towards radiography career and disabusing their

minds of any previously held wrong notions. This study was aimed at finding out those things that could possibly hinder young Nigerian secondary students from taking up radiography as a career, their level of awareness about the profession and the effects of socio-demographic variables on their choice of career.

The respondents' level of awareness was indeed very high as many of those who did not receive career talk on radiography indicated having heard of the profession but the level of their knowledge was indeed very poor even among those who received career talk on radiography. Only very few of all the respondents from the both groups were able to demonstrate in-depth knowledge of the profession.

From the respondents' answers on how they heard of the profession, career talk proved to be a very important means of creating awareness about this profession. It is also worthy of note that radiographers have a lot to do if the level of awareness about this profession is to be increased. From the responses, it was observed that many of the respondents in group 1 and about half of all the respondents in group 2 either heard of the profession through career talk delivered by a radiographer or through a radiographer they met at one time or the other in their life. None of the respondents indicated having heard of this profession from their career guidance counselor, and this indicates that the level of awareness of this career may even be low among the career guidance counselors and educators. Although, the findings in the study 'The career of radiography: Information on the web'⁷ shows that the information available on the net about the career of diagnostic radiography was not of satisfactory both in quantity and quality, the Nigerian secondary school student hardly has access to the internet. Even when he has, the level of information technology (IT) training he has is often not enough to enable him successfully navigate the relevant sites. This situation leaves the work on creating awareness about the profession to the career guidance counselors, educators and radiographers as they meet and interact with these young people in course of their

duty. The fact that most of the respondents heard about radiography within the last two years is indeed a thing of great concern. This shows that the profession is very unpopular. One may wonder why the respondents have not heard of radiography even when they have heard of medicine, pharmacy, nursing, and other professions and would like to pursue careers in any of them as shown by the results obtained. This could be because radiographers are not seen as very important members of the health care team. Perhaps, these young people would not want to take up a career where they would not be regarded with high degree of importance. This also shows that although there are web information about radiography, the respondents do not have access to these information, For those who have heard of the profession, most of them do not consider it a nice career choice because all they may possibly hear about it is the danger associated with working with ionizing radiations and this indeed scares them away from it. But is there any career without associated hazards? It is doubtful if there is any.

Although the respondents' level of awareness is high, they still do not want to take up radiography as a career. This is in line with the findings of a similar study on attitudes of Hong Kong high school students towards the nursing profession. The study showed that students were generally knowledgeable about nursing but were reluctant to pursue nursing as a career⁹. One of the most important factor considered in our target population was their in-depth knowledge of the profession. This was generally very low and this implies that the respondents may have heard of the profession without actually knowing what the profession is all about. Therefore, career talks are very essential in order to change this ugly situation and enhance secondary school students' knowledge of radiography profession and career.

Career talk was found to have great effect on the respondents. It should also be noted that the career talk had direct effect on their attitudes and perceptions. The effects of career talks cannot be underestimated if the scarcity of radiographers world-wide is to be reduced or eliminated.

Therefore, all organizations that are connected to radiography profession should take it upon themselves to see that this paucity of radiographers is eradicated as soon as possible by organizing regular career talks on radiography for the young people, especially those about to begin their higher studies in the university. Only two respondents chose radiography as their ideal career. Many of them who received career talk think that it is a good career to take up and about a half of them think they may eventually take up radiography as a career. For those who did not receive career talk, although many of the respondents think that radiography is a nice career, only very few of them think they could take up radiography as career later in life and this low number could be attributed to poor public image of radiography and radiographers. They may have thought it to be a good career because they know it has something to do with caring for people and saving life.

The perceptions of the respondents about various attributes of radiography profession and radiographers were generally positive. Perception of those that received career talk was better and this could be attributed to better information which they received. This was also evident in the rating of their overall willingness to take up the profession, as more respondents from group that received career talk showed more willingness than those in the group that did not receive career talk.

Some of the students heard of radiography in their physics or chemistry classes. Their attitude shows that little or nothing is being done by the teachers to show them that radiography could be a wonderful career to take up. It is possible that career guidance counselors and educators either do not know about this profession or that they know very little about it. This is because the students are supposed to have heard of it from them. Even if they are aware of the profession, it is obvious that they do not know much about it. This may be the reason for most of the respondents not demonstrating in-depth knowledge of the profession.

The results of this study shows that majority of the respondents' parents are well educated. Although these parents are well educated, it was also found that most of the respondents do not wish to take after their parents' career. This means that the parents' academic status and profession do not have much effect on their choice of career. Role models appear to have influence on the career choice of these young people. Some of them would want to take up the careers of their role models. It is pertinent to note that very few of the students have radiographers as their role model. This could be as a result of some of the detractors of radiography profession identified in a previous study by Eze et al⁴. One of the detractors is poor societal recognition of radiographers which could be due to poor professional image of radiographers⁵. This also could be a reason for most of the students not having radiographers as their role models. Practitioners of other professions such medicine, pharmacy, engineering, nursing and teaching have influence on these young people in making their career choices. Eze et al⁴ had opined that lack of professional pride and confidence, poor dressing habits and mannerism, and poor life styles of practicing radiographers could discourage a student from pursuing a career in radiography.

RECOMMENDATIONS:

1. Efforts should be made to improve public awareness of this profession especially among young people seeking admission into the university to study medicine or other courses allied to medicine. Radiography is equally rewarding and intellectually stimulating as medicine and other medical related courses. Also, like medicine and other allied health professions, it is concerned with caring people and fulfils the requirements of those whose life goals are to pursue career concerned with providing care for people.
2. Forum to educate the public on effects of ionizing radiation and protection measures taken to prevent them should be created. This is so as to re-orientate them, since most of

them have concluded that working with ionizing radiation is like 'a suspended death sentence'.

3. Radiographers should try and improve on their public image. In doing this, their mentoring of young people who may want to pursue a career in radiography could become effective.
4. Radiographers should become more forceful and independent in their work to be regarded as important members of the health care team. Being forceful and independent means properly regulating the profession and defining the duties and competence expected of radiographer.
5. More radiographers should study for higher degrees like M Sc and Ph. D in other to attract the academic minded youngsters to the profession. These prospective new entrants into radiography would definitely not like to have a stunted academic self-improvement. Vast improvement in academic status of Nigerian radiographers in the past one decade and half has redefined the practice radiography in the country.

REFERENCES

1. Utin CT. Professionalism in radiography: the Nigerian experience. *X - rays: Journal of the Association of Radiographers of Nigeria* 1993; 19(1): 25-30.
2. Brown A. Professionals under pressure: contextual influences on learning and development of radiographers in England. *Learning in Health and Social Care* 2004; 3(4): 213-222.
3. www.rrbnonline.org (Accessed 22/09/2011)
4. Eze C. U., Okaro A. O., Ochie K. The attractors and detractors of radiography as a career choice: a study in Enugu Southeast Nigeria. *American Journal of Scientific Research* 2010; 8: 12-17.
5. Milburn P. The professional image of radiography. *Radiography Today* 1992; 58(660): 19- 20.
6. Palumbo M. V., Rambur B., McIntosh B., Naud S. Perceptions of an ideal career versus perceptions of six health careers. *J. Allied Health* 2008; 37: 8-16.
7. Glennie E., Kirby A. The career of radiography: information on the web. *Journal of Diagnostic Radiography and Imaging* 2006; 6: 25-33.
8. Boxall A., Holmes K. Evaluation of radiography career information on the internet. *Radiography* 2004; 10: 45-52.
9. Rossiter J. C., Foong A., Chan P. T. Attitudes of Hong Kong high school students towards nursing profession. *Nurse Education Today* 1999; 19(6): 464-471.
10. Wilbur H. D., Evan R. K. Attitude towards teaching: how high school students feel about teaching as a profession. *Journal of Teacher Education* 1961; 12(2): 165-171.