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ABSTRACT

Objective

To investigate the perception of sister professional groups in Nigeria towards radiography profession.

Methods: Questionnaires were used to survey the opinions of 160 healthcare professionals from five professional groups. The respondents scored radiographers on some characteristics of professional occupations.

Results: Only in education was radiography scored 70.0 % and above by respondents. The range of scores in other areas was 55 – 65 %.

Conclusion: Nigerian radiographers need to strive harder to improve public perception on many indices.

Keywords: Radiography, profession, Nigeria, healthcare workers, score

Introduction

Radiography became a regulated profession in Nigeria by military Decree 42 of 1987 (now Cap R1 LFN 2004). Concurrently established was the regulator; Radiographers Registration Board of Nigeria (RRBN), which is responsible for determining the scope of knowledge for students, registration, licensing, and proficiency re-evaluation of practitioners, monitoring of radio-diagnostic centres for appropriate personnel, award of fellowship by examination, amongst other responsibilities. The small population of professionals [1], and their tendency to congregate around big cities, rather than rural areas, tend to make the professionals obscure [2]. In spite of that, the group positions itself as possessing specialized knowledge and skill in a recognized body of learning derived from research, education and training at a high level and ought to be recognized by the public as such [1].

A profession is born when any trade or occupation transforms itself through the development of formal qualifications based upon education, apprenticeship, examinations and the emergence of regulatory bodies with powers to admit and

discipline members, and some form of monopoly rights. A profession is also autonomous which gives it the power to control members, police, protect its area of expertise, and enjoy monopoly [3 - 5]. Professions enjoy high prestige conferred on them by society. Professionals are therefore, members of a profession who are governed by codes of ethics, profess commitment to competence, integrity and morality, altruism and promotion of the public good within their expertise domain and are accountable to society. Morality is a core component of a profession because ammorality leads to non-adherence to ethics and ammorality individuals that adhere to ethics can only be seen as ‘useful idiots’ [6 – 9].

The first professional occupations that met the qualities of a profession were surveying, medicine, actuarial science, law, dentistry, civil engineering, logistics, architecture and accounting [10]. Although radiographers themselves know that radiography is a profession, it is not clear if the sister professions have similar understanding. This work was designed to gauge the mindset of other sister professionals as regards the radiography profession.

Material and methods

This study evaluated respondents on ten characteristics, namely; education/skill, integrity, morality, social prestige, professional ethics, altruism, relationship between themselves, relationship with other professional colleagues, respect for senior colleagues, and esprit de corps. Questionnaires were distributed to 160 sister professional colleagues comprising 60 nurses, 40 medical laboratory scientists, 30 medical doctors, 20 physiotherapists and 10 pharmacists. These questionnaires were randomly distributed. Each of the respondents was required to score radiographers from zero to one hundred percent (0 -100%) on the listed characteristics. Collated responses were analyzed using SPSS Version 15.0 and the results are presented in tables.

Results

Each of the professional groups scored radiographers high on education/technical skills ($\geq 70\%$). Average score from respondents on other characteristics ranged from 55.88 ± 7.24 to $64.46 \pm 4.47\%$ which was rather poor for professional occupations (Table 1). The result also showed that nurses were more favorable to radiographers followed by physiotherapists with overall mean of 66.08 ± 6.03 and $62.02 \pm 5.08\%$, respectively (Table 2).

One way ANOVA showed that while there were statistically significant differences in the scores awarded to radiographers by those professional groups for integrity ($p = 0.000$), morality ($p = 0.000$), prestige ($p = 0.002$), altruism ($p = 0.034$), relationship between themselves ($p = 0.003$) and education ($p = 0.000$), there was no statistically significant differences in scores awarded for relationship with others ($p = 0.058$), respect for senior colleagues ($p = 0.062$) and esprit de corps ($p = 0.104$) (Table 3).

Table 1. Mean scores from respondents on the studied characteristics

Characteristics	n	Mean \pm STD
Integrity	160	64.11 \pm 6.18
Morality	160	64.46 \pm 4.47
Social prestige	160	64.05 \pm 6.05
Altruism	160	59.98 \pm 8.56
Relationship between radiographers	160	55.88 \pm 7.24
Relationship with non-Radiographers	160	64.01 \pm 6.09
Respect for senior colleagues	160	63.26 \pm 5.72
Professional ethics	160	57.63 \pm 8.10
Esprit de corps	160	58.11 \pm 7.84
Education/Technical skill	160	75.35 \pm 7.44

Table 2. Comparison of the mean scores from the professional groups

Parameters	Nursing	MLS	Pharmacy	Physiotherapy	Medicine & surgery	Total mean \pm SD	ANOVA p-value	Inference
Integrity	65.30 \pm 7.26	64.83 \pm 5.01	60.40 \pm 6.33	65.15 \pm 5.45	61.30 \pm 4.36	64.11 \pm 6.18	0.000	Significant
Morality	64.23 \pm 5.10	63.03 \pm 2.97	64.50 \pm 4.38	68.25 \pm 4.06	63.80 \pm 3.86	64.37 \pm 4.47	0.000	Significant
Prestige	68.02 \pm 6.13	62.50 \pm 2.90	60.80 \pm 5.75	63.80 \pm 5.89	59.43 \pm 4.23	64.05 \pm 6.05	0.002	Significant
Altruism	67.58 \pm 5.15	57.98 \pm 5.78	51.50 \pm 6.69	57.90 \pm 6.35	51.67 \pm 6.21	59.98 \pm 8.56	0.034	Significant
Relationship (selves)	59.58 \pm 6.26	51.85 \pm 6.69	53.40 \pm 7.69	55.75 \pm 7.30	54.77 \pm 6.29	55.88 \pm 7.24	0.058	Non-Sig
Relationship (others)	67.42 \pm 5.56	62.25 \pm 4.93	59.50 \pm 6.85	65.10 \pm 5.18	60.33 \pm 5.07	64.01 \pm 6.09	0.003	Significant
Respect for Snrs	65.75 \pm 5.43	63.88 \pm 4.87	59.50 \pm 2.84	64.25 \pm 3.73	58.03 \pm 5.34	63.26 \pm 5.72	0.062	Non-Sig
Prof ethics	60.35 \pm 6.00	63.38 \pm 6.14	54.50 \pm 5.50	50.50 \pm 6.86	50.33 \pm 6.42	57.63 \pm 8.10	0.000	Significant
Esprit de corps	62.80 \pm 6.61	56.88 \pm 3.15	49.50 \pm 9.27	59.75 \pm 6.38	52.17 \pm 6.91	58.11 \pm 7.44	0.104	Non-Sig
Educ/Skill	79.75 \pm 6.79	75.25 \pm 6.09	75.30 \pm 6.57	69.75 \pm 5.50	70.43 \pm 6.31	75.35 \pm 7.44	0.000	Significant
Total mean	66.08 \pm 6.03	56.99 \pm 5.05	58.89 \pm 6.87	62.02 \pm 5.08	58.23 \pm 5.50	62.68 \pm 6.73		

Discussion

The professional status of radiography in Nigeria was evaluated in this study by other professional groups that work and have close relationship with radiographers. The average mean scores obtained by radiographers on many indices were similar to scores obtained in 1985 in America by Parker and Chan which placed radiologic technologists (radiographers) on equal footing with non-professionals [11]. The present survey and the cited one have a three decade gap between them and were conducted on different continents yet the perceptions remained the same. It might be inferred that the radiography profession made slow progress in the eyes of sister professions.

From results, radiographers had the highest score on education (75.35 ± 7.44 %) and the least was on relationship between themselves (55.88 ± 7.24 %). Evidence abounds to justify the high rating for education as Nigerian radiographers with Ph.D and M.Sc are ≥ 40 and ≤ 200 , respectively [1]. Furthermore, they undertook rigorous researches that may create paradigm shift in their field in future [12 - 14]. The score for other characteristics were fair but not excellent. The inference is that whereas radiographers are highly educated professionals, they need to work more on intra-professional harmony. Longstanding, but recently resolved, intra-professional squabbles [1], may have influenced respondents to rate them low. The regulatory body also needs to step up in its enforcement of codes of conduct to minimize negative perception by others. To our opinion, the RRBN should enforce sanctions as at and when due for defaulting radiographers if negative public perception by the public are to disappear.

While high salary paid to professionals in comparison to non-professionals may give a feeling of importance, and radiographers indeed benefit from such high salary, it should be noted that salary alone is an inadequate yardstick since many non-professional occupations now enjoy better salaries [15]. The implication from this study is that radiographers in Nigeria should strive harder to improve in all the characteristics of a

profession in order to enjoy higher ratings in future evaluations.

Recommendations

To attain a truly professional status, radiographers in Nigeria have to develop strong positive principles such as:

- i. **Objectivity:** Objectivity precedes improvement. For example, this study enlisted 90 radiographers who awarded excellent scores to themselves thereby necessitating exclusion of their responses. Lack of objectivity may impede a change in attitude. The ARN and RRBN need to also objectively evaluate themselves and come up with strategies that can improve professional image.
- ii. **United and committed membership:** All radiographers should be committed to a single and strong professional association and avoid fanning the embers of discord. Multiplying associations and possibly, regulatory Boards, and dissuading fresh graduands from aligning with the professional association (ARN) should be deemed as misconduct. Likewise, the ARN should work harder in order to ensure that she had a firmer grip on her members.
- iii. **Strong and effective regulation:** One of the characteristics of a profession is a regulatory body with powers to admit and sanction defaulting members. The Association of Radiographers of Nigeria (ARN) and the Radiographers' Registration Board of Nigeria (RRBN) need to have the courage to summon and to sanction erring radiographers and devise a means of honoring/rewarding outstanding ones.

Conclusion

Nigerian radiographers need to strengthen those areas where they scored low marks. Happily, there were significant difference in the scores awarded radiographers in many of the rated characteristics. This means that with more concerted efforts radiographers may likely score higher marks in future. The ability to operate even the most sophisticated machines/equipment is not sufficient

to have radiographers rated as professionals. Hence the need for all radiographers to do everything possible to be united so as to command much more public respect. This is what will make radiographers in Nigeria to really be the professionals they see themselves to be.

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