REVIEW ARTICLE

A case for CT head and plain film reporting role for radiographers in some major UK trauma Centres and their Counterparts in the developing world;

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INTRODUCTION

It is the convention, culture and established tradition in radiology departments that all imaging procedures have to be accompanied by a medical report, and by law, radiographers have no business issuing these reports as it is an exclusive reserve of medically- trained radiologists. Of recent, however, empowered and motivated by the graduate status of radiography education and many recent clinical and political developments, it appears the profession is slowly moving closer to the centre ground of image reporting and other clinical roles formerly reserved for the medically-trained radiologists. New terminologies like 'role extension and development', 'continuous professional development (CPD)', 'skill mix,' 'delegation' and similar buzz words are creeping into the radiographers' vocabulary . In the spirit of role extension, it is now common practice for radiographers to perform intra-venous cannulation, perform barium enemas, perform and report abdominal and obstetric ultrasound , report screening mammography and report plain film A&E referrals. More specialties are being added to the list including Cranial C.T. reporting. The purpose of this article is to develop a case for a C.T. head reporting role for radiographers, in a popular UK trauma centre and explore the possibility of plain film reporting role for radiographers working in a typical developing country like Nigeria. There are no C.T. head reporting radiographers as yet in some UK trauma centres and the author is unaware of any reporting role for radiographers in Nigeria,

LITERATURE REVIEW

Plain film reporting by radiographers had a humble beginning with triage of images into normal and abnormal categories[25]. This isolated and individual effort at medical image interpretation by radiographers was given subtle encouragement in the mid 1980s by the removal of the legal obstacle to medical image interpretation by the Council for professions allied to medicine (CPSM) which was the statutory body that regulated the practice of radiography at the time[18].

Medical image reporting by radiographers went a notch higher by the advent of the red dot system where the radiographer used a red dot to flag abnormal radiographs to assist interpretation by the clinical staff in A&E[2] . The use of the red dot system has spread to most U.K. Hospitals[6]. It has been claimed that reports by radiographers who had no training whatsoever in reporting were riddled with high false positives[19] and that carefully selected and trained radiographers can achieve reporting accuracy to the same level as radiologists when reporting A&E radiographs[17] and all radiographs in clinical practice[3]. It was Saxton who suggested that because the radiologists lacked the time for reporting due to increase in newer imaging modalities, it was time for radiographers to physically take over some of the reporting role to reduce the radiologists' workload[24].

The College of Radiographers opened the debate on reporting through the Code of conduct statement of 1994 to the effect that radiographers should provide verbal and written reports on image appearances[7]. As if it were reacting to theCode of Conduct statement, the Board of the

Faculty of Clinical Radiology, Royal College of Radiologists (RCR) stated that "there may be no statutory impediment to a non-medically trained person reporting a radiological examination and making technical observations , but the person without a medical training cannot reasonably be expected to provide a medical interpretation"[4]. Two years later, the College of Radiographers replied through a vision paper, which stated as its policy, that the reporting of images by radiographers was not an option for the future but is a requirement'[8]. The two colleges SCOR and RCR had to issue a joint paper to resolve the different positions by outlining the inter-professional roles and responsibilities of a radiology service where certain tasks formerly undertaken by radiologists, under certain safeguards , may be delegated to the radiography staff[21]. This paper is of the view that non-medically trained reporting practitioners can provide descriptive reports but cannot provide a medical report. Formal reporting roles by radiographers is now well established[6] and the college has recommended the inclusion of image interpretation and clinical assessment in the undergraduate curriculum while encouraging practicing radiographers to use the CPD route to develop the necessary skills to undertake hot reporting of accident and emergency radiographs[26]. The college of Radiographers went a step further to issue a definitive guidance on reporting by radiographers[7]. Yet the debate will not go away. In reaction to a recent irritating publication by the Royal College of Radiologists in relation to the topic (RCR,2010), the Society and College of Radiographers issued a definitive pronouncement which counters the RCR's un-evidenced stand that medical image interpretation by radiographers is unsafe[23].

Through a guidance on the document "Skill mix in clinical radiology" the Royal college of Radiologists, Faculty of Clinical Radiology presented a case for the role extension of non-medical healthcare professionals in diagnostic imaging[20,27]. They were of the view that, with adequate training, radiographers could take up some duties formerly performed by the radiologists under agreed protocol and system of work. Through a similar system of delegation, assistant practitioners can be trained to take up some of the more routine tasks of radiographers. In a joint guidance from the the Royal College of Radiologists and The Society and College of Radiographers "Team working within clinical imaging : A contemporary view of skills mix" , the two colleges mainly expanded their views in the earlier document[23]. The author is unaware of any publication in the developing countries that shows the position of the radiologists and radiographers on the subject.

RATIONALE FOR A REPORTING ROLE FOR NON-RADIOLOGISTS.

There is a legal requirement that each radiation exposure must be justified and a clinical evaluation recorded for each medical exposure *"The employer shall take steps to ensure that a clinical evaluation of the outcome of each medical exposure, is recorded in accordance with the employer's procedures or, where the employer is concurrently the practitioner or operator, shall so record a clinical evaluation, including, where appropriate, factors relevant to patient dose. " (Ir(me)r, 2000)*[10]. Ir(me)r is un-committal as to the professional background of the evaluator. This is a subtle invitation to all, including radiographers, to step into the reporting arena.

The "NHS Plan" which was advertised as a plan for investment in the NHS and a sustained increase in funding with raised expectation from patients of the services can only mean an increase in the volume of work to be done and the nature, diversity and complexity of that work and an invitation to radiographers and other health workers to participate in reducing the waiting time[11] . The plan made a proposal in section 9.14 to create assistant practitioners in radiography in order to release radiographers to extend their role into some of the tasks traditionally undertaken by radiologists.

Reporting is one such role. There is also a reference to 'NHS staff working smarter to make maximum use of the talents of all the NHS

workforce 'and' breaking down the barrier between staff. These are signs that the old tradition of medical profession dominance needs to be reviewed.

The audit commission of 2002 reported a 40 % increase in the number of computerized tomography (ct) cases and a 60% increase in magnetic resonance (mri) cases between 1996 and 2002 and 1997 and 2002 respectively[1]. This increase in demand coupled with shortage of radiologists put a further strain on the services and threatened the smooth sail of the NHS plan. Radiographer reporting was suggested as a way to alleviate the workload of the radiologists[5]

MEDICO-LEGAL ISSUES THAT MAY IMPACT ON REPORTING RADIOGRAPHER'S ROLE

Role extension such as Cranial CT and plain film reporting has associated responsibilities. Cranial C.T.and plain film reporting radiographers are legally professionally accountable for acts of omissions arising from their practice in Plain film and cranial C. T. Reporting and are subject to GMC's guidelines on delegation. It is also subject to the Health Professions Council (HPC) Standards of Conduct, performance and Ethics which requires registrants to act within the limits of their knowledge, skills and experience[14].

Where individuals are undertaking delegated roles , these should be performed in accordance with a scheme of work and protocols agreed jointly by the delegator and the individual to which the task has been delegated. Individual practitioners need to understand that the responsibility for the proper undertaking of delegated roles, duties and tasks is the responsibility of the delegatee. This responsibility is shared with the delegator only in so far as the delegator must be assured that the delegatee has been appropriatly trained and has the necessary knowledge and skills[22].

DISCUSSION

It is the convention in every department of radiology that radiographers produce the images and the radiologists report. It has been assumed that radiologists therefore should be more skilled in performing this reporting task because they possess superior medical knowledge. With increased volume of work, government initiatives and the graduate status of radiographers and other health professionals training, some of the roles like C.T. head reporting is being delegated to radiographers and other health professionals with some restrictions. The main arguments in favour of radiographer reporting are the shortage of radiologists and the timeliness of the report, which obviously speeds up patient management because of quicker turnaround time and ultimately results in client's benefit and reduces the risk of litigation. The radiologists on their part continue to repeat the line that non-medically trained reporting practitioners can provide descriptive reports but cannot produce a medical report which can only be in the province of a person with a medical training. They maintain that this absence of medical training cannot be compensated for even when the non-medical practitioner acquires further medical knowledge relevant to their practice. The radiologists seem to be clinging to this role as a birth rite instead of confronting the abundant robust evidence in the literature to the contrary. The catalysts for suggesting role extension of radiographer-reporting of cranial C.T. images may be due mainly to a number of factors:

- Guidelines for head injuries issued by the national Institute for clinical excellence[15].
- The national clinical guidelines for stroke issued by the National Clinical guideline for stroke[16].
- Dementia screening.
- An ageing population.

All these attract an expectation of an increase in the number of C.T. scans of the head The demand for the service will be let down by the scarcity of radiologists to provide urgent report. There is surely a case for a reporting role for radiographers to improve the turn-around time for these type of patients.

To let this argument go away, the universities should revise their curricula to include more anatomy,pathology and disease presentation, increase the depth of a, sitting in reporting sessions as part of clinical training .Trainee nurses and medical rehabilitation students are allowed these facilities, so why not trainee radiographers? The emphasis here should be what is best for the patient : to wait for hours for the radiologist to issue the report or to accept that a properly trained radiographer who scanned the patient issue the report to save everybody's time?

There appears to be increasing insecurity and frustration within the radiology community in the developing countries about role extension of radiographers into medical reporting of plain films and ultrasound images as this practice leaves them with nothing to do in radiology departments as the rudimentary training they receive in CT , MRI reporting and Interventional techniques gives them no confidence to practice at the same level as their counterparts in the developed world. It would appear that part of the solution to this role extension by radiographers into areas traditionally thought to belong to the radiologists would be adequate training of radiologists to enable them to assume their proper roles instead of expending unnecessary energy over participation of radiographers in reporting and disrupting the excellent team spirit which exists all over the radiology world. The momentum is definitely on, the boundaries need to be re-defined for the benefit of the patient and not for the inflated ego of our fellow clinicians who have failed to realize that the level has changed. It is suggested that radiologists report CT, and MRI and get training to do some fluoroscopy and the complex vascularinterventional procedures while the radiographers continue with acquisition, processing and presentation of medical images while the skills of plain film and ultrasound reporting be shared between the two professions in proportion to the available skills. It is unfair to make radiographers scapegoat of the inadequacy of the radiologists' training which does not measure up to 25% of the breadth and depth of the training in developed and some developing countries.If they cannot accept this, then let the debate come to the open in the court of public opinion.

CONCLUSION

The current varied roles of health practitioners has thrown up a plethora of terminologies such role extension, skill mix to convey to all that these practitioners are doing more than the traditional roles assigned to them. Radiographers now perform barium enema, perform i.v cannulation and other clinical roles formally reserved to radiologists. Plain film and cranial C.T reporting are one of the extended roles and radiographers have made their case for holding onto these roles citing the interest of the patient as their motivation. On the other hand, radiologists insist that the radiographers have no business with image reporting by insisting without any evidence that it is unsafe for the patient. Robust evidence is required to get to the bottom of this argument. If it safe for the nurses, physiotherapists and neuro-surgeons to give clinical opinions on images, one wonders why the radiologists are bent on excluding the radiographers from this role .No matter in whose favor the debate swings, the timeliness of the report which benefits the patient's treatment will carry the day.

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