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HOW IMPORTANT ARE PATIENT OUTCOMES FOR BIOMEDICAL SCIENTISTS?

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INTRODUCTION

- Approximately 70% of patient diagnoses are dependent upon laboratory test results (Department of Health (DoH), 2004; Beastall, 2008; DoH, 2008).
- Biomedical Scientists have little patient contact and many patients and healthcare professionals lack an understanding of the role (DoH, 2006)
- Professional guidelines for Biomedical Scientists refer frequently to the importance of the patient and service user (HCPC, 2014; HCPC, 2016; IBMS, 2018)
- How Biomedical Scientists practice in the patient's best interests is not explicit within the professional or statutory guidelines

AIMS & OBJECTIVES

- To determine whether students on the BSc Biomedical Science award are adequately prepared for the person-centred aspects of the role
- To elicit stakeholders' views on factors which may impact upon the Biomedical Scientist's contribution to person-centred care and patient outcome

METHODOLOGY

- Utilised a modified Delphi methodology to establish whether consensus exists amongst a panel of experts (Keeney, Hasson and McKenna, 2011).
- Participants included Biomedical Scientists, staff and students on the BSc Biomedical Science programme and representatives from the Professional, Statutory and Regulatory Bodies (PSRBs).
- An overview of the Delphi study design is included in figure 1.

Round One

- Online focus groups
- Online interviews
- Thematic analysis of responses (Braun and Clarke, 2013)

Round Two

- Scored agreement using a 5-point Likert scale
- 70% consensus level adopted

Figure 1: Overview of the Delphi methodology used in this study

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FINDINGS ROUND ONE

- 19 participants in 1st round, including 2 PSRB representatives, 5 HCPC registered BMSs, 5 academics and 7 students from the BSc Biomedical Science programme
- A selection of illustrative quotes are included (figure 2)

BMS 4: "Because we only see samples... it can almost seem like a bit of a production line, you have to keep reminding yourself that there's a patient at the end of this. I think on the whole that the majority of people do realise that and work to that end."	PSRB 1: "OK. I found those quite difficult. I feel quite ashamed of myself because you'd think after all these years of me talking to people (pause) but it's just one of those things you take for granted."
Theme: Patient in Context	
Academic 4: "When you get that many specimens, it's difficult to devote... the same amount of attention to each one, but yeah, you're striving to have the patient's best interests at heart and their outcomes."	Student 5: "It's all about patients first so that I think depends upon, no matter what your role within a hospital setting, you're always going to put patients first."

Figure 2: Selection of illustrative quotes for 'patient in context'

FINDINGS ROUND TWO

- 16 participants returned the 2nd round questionnaire, which included 4 BMSs, 5 academics and 7 students on the BSc Biomedical Science award
- No PSRB representatives returned responses in the 2nd round

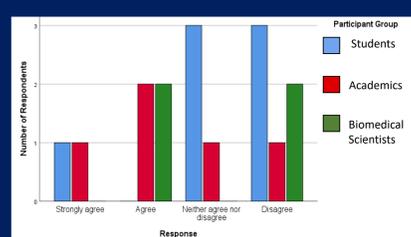


Figure 3 (left): Stakeholder responses to the statement 'The desire to work in the best interests of the patient at all times is not shared by all Biomedical Scientists.'

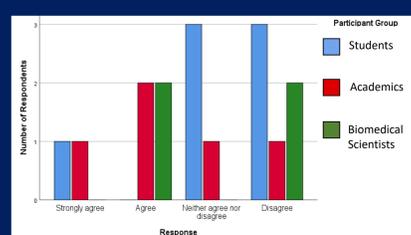


Figure 4 (left): Stakeholder responses to the statement 'It's possible for a Biomedical Scientist to do their job well without considering the needs of the patient.'

OVERALL FINDINGS & DISCUSSION



Figure 5: Overall consensus findings 2nd round

- Biomedical Scientists are not well integrated into the multi-disciplinary team (MDT)
- There is a lack of recognition for the Biomedical Scientist role and what it involves
- Divergence of opinion on whether lack of patient contact impacts upon the Biomedical Scientist's ability to focus upon patient outcomes
- Student and academic groups demonstrated conflicting views to BMS group
- Theory-practice gap exists within academic and student groups. Needs to be addressed through teaching and learning strategies (Greenway *et al.*, 2019).

TAKE HOME MESSAGES

- Evidencing ways in which Biomedical Scientist's can work in the best interests of the patient is not defined by professional or statutory bodies.
- Professional guidelines should be updated to define these key concepts and outline how Biomedical Scientists can evidence these.

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