Establishing Professionalism through Digital Health Platforms

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Abstract
Despite the emerging interest in (health) platforms, there is limited research on their role in shaping professional work. Existing research has primarily focused on how platforms generate new forms of work, such as micro-tasking and crowdsourcing. There is limited understanding, however, about what forms professional work might take place on platforms, and, perhaps more importantly, how platforms can establish professionalism, primarily in contexts where this is under-developed or undervalued. Our paper illustrates how this can be achieved drawing on a longitudinal qualitative study of a non-profit platform that is dedicated to delivering free online health education in post-conflict countries. The paper discusses four mechanisms through which platforms make up professionals: standardisation of clinical practice; normalisation of professional behaviour; development of medical knowledge; and inculcation of values. It then aims to discuss the paradoxical bureaucratic effects platforms may have as they enable those mechanisms and the potential colonising consequences they may engender.

Keywords: health platforms, professionals, knowledge, practice

1.0 Introduction
The ‘new normal’ in the post-pandemic world has enabled new ways of (digital) working (e.g., Barnes, 2020). Within this context, platform work has been attracting academic and practitioner attention due to its unique features (e.g., Howcroft and Bergvall-Kåreborn, 2019). They include: the technology-mediated nature of interactions between those who supply and demand labour; the mostly low-skill tasks (micro tasks) with workers being considered freelancers who undertake project-based work (Vallas and Schor, 2020); and the unregulated character of work due to absence of national laws. Platform work presents asymmetries such as payment irregularities (Webster, 2016) and employment dynamics (Panteli et al., 2020). Despite emerging
emphasis on platform work, there is limited understanding of their role in shaping professional work, which we aim to address in this developmental paper.

Drawing on preliminary findings from a longitudinal qualitative study of a non-profit platform, presented in 3.1 below, we begin to explain how platforms shape clinical work, medical knowledge and professional identity of clinicians and medical students in Somaliland, offering theoretical contributions around the mechanisms through which platforms establish professionalism in post-conflict settings and their consequences. In what follows, we discuss the literature on platform work and professionalism. We then present our research site and methodological approach. We subsequently present our preliminary analysis, and conclude with some envisaged conclusions.

2.0 Platform work and professionalism

Platforms create a digital labour market in which different types of work emerge. Howcroft and Bergvall-Kåreborn (2019) present four types: (a) online crowdwork like micro-tasking; (b) ‘playbour’ work where labour is hidden but value is created whilst being unnoticed; (c) asset-based services where work is undertaken offline with the platform mediating to bring together the suppliers and the consumers of those assets (e.g., Uber); and (d) professional crowdwork which refers to professionals who act as self-employed and undertake complex high-skilled projects (Vallas and Schor, 2020). Little emphasis, however, has been placed on the role of the platforms in making up professionals, mediating the development of their identity and expertise.

Professional work is characterised by an underpinning expertise that legitimises autonomy to regulate work, and sets standards that determine inclusion/exclusion to a professional group (Abbott, 1988; Macdonald, 1995). Professional power refers to the ability to retain jurisdictions and closure. Professionalism has undergone significant changes since the 1970s given the adoption of managerial and information technologies (Exworthy and Halford, 1998). Current debates explore how the digital plays out with professional power and knowledge.
One side of the debate looks into how digital technologies transform professional status given their emphasis on more standardised and rationalised ways of working that de-limit professional choice over how work is to be conducted and in what way. This usually occurs by transforming professional work into project-based work, leading to higher uncertainty and lower-pay (Dunn, 2020). Hoeyer and Wadmann (2020) further argue how digitalisation erodes professional judgment because of the emphasis on data production and data-orientated decision making that overtakes clinical intuition and experiential data. This engenders de-professionalisation, as professionals’ distinct status and power gets eroded in the name of efficiency. Others have interpreted digitalisation as illustrating opportunities for re-professionalisation and re-skilling whereby technologies undertake routinised tasks, allowing professionals to focus on high-skilled and abstract jobs, retaining and remaking their professional influence. Digitalisation enhances professional autonomy by offering flexibility in terms of when and where work is conducted, removing professionals from formal forms of employment (Purcell and Brook, 2020). Opportunities for re/de-professionalisation may occur simultaneously when the digital is introduced in a professional workplace such as healthcare (Petrakaki et al., 2012). There are therefore unclear effects of the digital on professionals and limited understanding as to how digital platforms can institutionalise professionalism, especially in settings where this is questioned or under-valued.

3.0 Research Design

3.1 Our Research Site: MedicineAfrica

We studied MedicineAfrica which was established in 2008 with the purpose of bridging medical education gaps between the UK and poorly resourced, often post-conflict, states, such as Somaliland and Palestine (Woodward et al., 2014). Platforms offering education have mostly been studied in terms of their impact on higher education or schools or on students’ learning experience (e.g., Pursel et al., 2016), while their potential to contribute to the professional development of those delivering course online has been neglected. MedicineAfrica has been identified as a digital platform leading to the creation of professional value (Chamakiotis et al., 2021) and constitutes an ideal research site to study how platforms help to establish professionalism in the ‘new normal’ context we are in.
3.2 Methodological Approach
We collected data through a netnography (Kozinets et al., 2014) and interviews with Somaliland-based tutees. Our netnography (2018-2020) involved online tutorials in nursing, research skills and clinical reasoning. We conducted 50 interviews in total; 20 interviews in Phase 1 (2016-2018), involving the founder/director, administrators, and tutors with management responsibility; and 30 interviews with Somaliland-based tutees in Phase 2 (2020; 24 medical students, 3 nurse students, and 3 qualified clinicians). Interviews were semi-structured and were conducted electronically. We are currently analysing our dataset thematically (Braun and Clarke, 2006) on NVivo, which has revealed four mechanisms presented next.

4.0 Preliminary Analysis
Our current analysis points to four mechanisms that enable digital platforms to establish medical professionalism in settings where this is under-developed: standardisation of clinical practice; ‘normalisation’ of professional behaviour; development of medical expertise; and inculcation of value. We present below some interview quotes that illustrate those four mechanisms.

**Standardisation of clinical practice**
Interviewees reported how MedicineAfrica helps them overcome one of the country’s major problems, which is the highly idiosyncratic and individualistic manner with which medical conditions are being treated as a result of the lack of clinical protocols. The establishment of standards has been valuable for the institutionalisation of professional bodies; in healthcare, standards have been considered the holy grail. Although their implementation is highly problematic and variations seem to be inevitable, in the case of Somaliland, diversity of clinical practice was viewed as a significant problem of the health service. Exposure to British clinical standards was hoped to overcome such diversity:

“The problem is that there are no guidelines to treat, for example, pneumonia. So, one doctor might give a drug and another doctor may see that another drug is way better than the first one… and will just change the treatment” (HS6M15).

“MedicineAfrica really helped us to overcome such diversities” (AS6M5).

**Normalisation of professional behaviour**
The second mechanism was normalisation of medical professionals’ behaviour, especially during doctor-patient interactions. Interviewees reported how doctors lack communication skills that are vital when they need to communicate negative news to
patients and/or their families. This largely comes from a tradition whereby doctors pay almost unidirectional attention to the medical side of consultation, overlooking the social side of it.

“They do have bad communication with the patients, and they don’t know how to care for the patient. Mostly, they rush into give the patient a treatment, or a drug, and they think that giving a patient a drug is very important, rather than consulting the patient, cooling the patient, or calming their emotion” (HS5-F5).

**Development of medical expertise**

MedicineAfrica provides tutees with an opportunity to enhance their medical expertise. Post-conflict countries tend to have significant gaps in medical specialisations and MedicineAfrica addresses this gap by offering the expertise that is missing. Consequently, medical students are much better equipped to understand, diagnose and treat conditions. The example below demonstrates how medical students strengthened their knowledge and improved their ability to make accurate diagnoses. Comparisons between current doctors’ limited or outdated knowledge and tutees’ in-depth expertise gained through the platform were frequently made.

“One of the challenges..is that most of the doctors are not up to date… For example, we get a lot of information from MedicineAfrica about hypertension. So, when you go to the ward and you tell the doctor that some patient needs to be monitored because their blood pressure is not stable, the thing they will be asking you about is she hypertensive? And you say no, and they will not take that into consideration. She's not hypertensive. Okay, there's no problem. When you tell them the heart blood pressure has arisen from this to this and that’s a bit concerning […] So, there is a discrepancy between what you have learnt and what you actually see in the ward and the rotations” (HS6-M15).

**Inculcation of Values**

Through MedicineAfrica, medical students are being presented with various approaches that other national healthcare services are taking to treat medical conditions. Comparisons between what their system values and does, and what other systems do offers rich learning opportunities. At the same time, the voluntary work that UK-based tutors offer to the platform incites students to consider offering their gained expertise to others that might be lacking it. Wider societal benefits might thus emerge.

“I have understood much, much bigger concepts from MedicineAfrica because in Hargeisa, you see patients dying and you don’t really think that’s a big deal, but when you see what other countries are doing, you really understand that something must be addressed, isn’t it?” (HS6-M2).

**4.0 Conclusions**

Although our analysis is still underway, our identification of the four mechanisms presented above begins to explain how platforms institutionalise professionalism in
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under-developed healthcare settings. It highlights the paradoxical consequences of platforms that end up making up professionals through bureaucratic mechanisms, whilst also considering the extent to which this process of professional institutionalisation is underpinned by an underlying and largely unnoticed process of colonisation; in our case, of medical character.

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