

## Narrative Review

# Speaking-up for patient safety: A scoping narrative review of international literature and lessons for radiography in Ghana and other resource-constrained settings

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## ABSTRACT

**Objectives:** Employees 'speaking-up', or raising concerns about unsafe practices, has gained traction across healthcare, however, the topic has not been widely discussed within radiography generally or within resource-constrained healthcare settings. A systematic scoping narrative review identified the experiences of radiographers in speaking-up about safety concerns, which was extended to healthcare professionals more broadly. The scope of the review was further extended to cover speaking-up in non-healthcare resource-constrained settings in Africa.

**Key findings:** Sixty-three studies were included in the review. The majority originated from westernised and/or higher resource health systems, with a dearth of literature from Africa and other resource-constrained settings. Several studies identified barriers and enablers confronting healthcare workers wishing to speak-up. While 'speaking-up' as a concept has gained international interest, most studies are, however, focussed on nursing and medical practice contexts, overlooking other healthcare professions, including radiography. The findings are synthesised into a series of key lessons for healthcare and radiography practitioners in Ghana and other resource-constrained settings.

**Conclusion:** The topic has been largely overlooked by policy makers, both within healthcare generally and specifically within radiography in Ghana. This is particularly concerning given the many complexities and risks inherent to radiography. A radiography and a healthcare workforce lacking in voice is poorly positioned to improve workers' safety and patient safety. More generally, promoting speaking up could enhance Ghana's ambitions to deliver a high-quality health care system and Universal Health Coverage (UHC) in the future.

**Implications for practice:** National and regional policy makers need to implement speaking-up processes and procedures reflecting the lessons of the literature review, such as ensuring no detriment as result of speaking-up and making staff feel that their concerns are not futile. Speaking-up processes should be implemented by individual organisations, alongside staff training and monitoring.

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## Introduction

Patient safety is concerned with avoiding unwarranted and avoidable harms resulting from actions taken, omitted, or decisions made during the healthcare delivery process.<sup>1</sup> There are numerous patient safety issues in imaging radiology,<sup>2</sup> where a large and diverse number of patients undergo a range of routine and unplanned examinations and interventions in working environments

that require advanced levels of communication with service users and between healthcare systems.<sup>3,4</sup> Communication issues between radiology staff, patients and other healthcare professionals was recently found to be a major risk to the delivery of safe and effective healthcare.<sup>1</sup>

"Speaking-up" can make a significant contribution to ensuring patient safety in various clinical settings.<sup>5,6,7</sup> Speaking-up is used interchangeably with related terms, such as raising concerns, or internal whistleblowing: for example, Mannion et al.<sup>8</sup> state that whistleblowing can be explained as the raising of concerns or speaking-up about unsafe, unethical or poor-quality care by employees to people in roles that may be able to effect change. In this

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paper, we refer to “speaking-up” or “raising concerns”, unless the term “whistleblowing” is specifically referred to in the documents reviewed.

Although the importance of speaking-up across healthcare has recently gained traction, empirical research about the topic is under-developed in healthcare.<sup>9</sup> Frameworks and interventions to support speaking-up have been developed in a number of healthcare systems internationally, with varying degrees of effectiveness, although the quality of evaluative research undertaken has been problematic.<sup>10</sup> Few studies have been conducted in the context of radiography practice and the topic has not been researched in lower income countries such as Ghana or similar healthcare systems experiencing severe resource-constraints, where high workloads and significant understaffing present persistent challenges for the delivery of high-quality care.<sup>11</sup> Speaking-up policies that do exist in African countries have been targeted almost exclusively at financial corruption in the public sector, with little evidence of their effectiveness.<sup>12</sup>

### Radiography and the health system in Ghana

The national healthcare system in Ghana aims “*To improve access to quality, efficient and seamless health services that is gender and youth friendly and responsive to the needs of people of all ages in all parts of the country*”.<sup>13,19</sup> The Ministry of Health (MoH) is responsible for developing policies and managing healthcare delivery, which is delivered through the Ghana Health Service (GHS).<sup>14,15</sup> Over the past 90 years, the provision of Ghana's imaging services, although still woefully inadequate, have improved, with the commissioning of MRI and CT scanners, digital X-ray equipment and ultrasound machines in hospitals across the country. However, the radiography workforce has been continually under-developed<sup>16,17</sup> with inadequate training facilities and poor conditions of service for practising radiographers.

Health professionals in Ghana are ethically and legally accountable to the patient.<sup>18</sup> The Patient Charter<sup>19</sup> mandates all health practitioners to protect the rights of the patient to safe, competent and quality care. Nevertheless, no specific guidelines exist to regulate practising radiographers speaking-up about patient safety compromises in Ghana. Furthermore, there is currently no whistleblowing or “Speak-Up” guidance developed by the MoH or GHS. Neither the Allied Health Professions Council (AHPC), the regulatory body for radiographers in Ghana, nor the professional body, the Ghana Society of Radiographers (GSR) has guidelines or procedures for raising concerns on issues regarding patient safety.

There are anti-corruption laws in Ghana such as the Whistleblowers Act (Act 720), passed by the Parliament of Ghana in October 2006. Actions reportable under the Act that are relevant within healthcare include economic crime, waste misappropriation, mismanagement of public resources and endangering the health or safety of an individual or a community.<sup>20</sup> Prior to the Act, Ghanaians who participated in whistleblowing often faced personal and professional detriment, which in turn raised the insecurities and anxieties of potential whistle-blowers.<sup>21</sup> Therefore the Act specifies that whistleblowing reports are to be handled as highly confidential information.<sup>20</sup> However, since 2006 the bill has not generated any substantial observable results.<sup>11</sup> At the 4th National Dialogue on Whistleblowing in November 2019, organised by the Ghana National Commission for Civic Education (NCCE) in collaboration with the EU, the Chairperson of the NCCE pleaded with Ghanaians to utilise protections stipulated in the Whistleblowers Act to report fraudulent and corrupt activities. Institutions and individuals mandated to receive whistle-blower

reports were also reminded to protect the identity of whistle-blowers.<sup>22</sup>

In the absence of policy and research to guide radiographers in Ghana, the aim of this paper is to explore the extant international literature on speaking-up in healthcare in an attempt to draw relevant lessons for the radiography profession in general, with particular focus on Ghana and other resource-constrained settings.

### Methods

The literature in this topic area embraces diverse theories and methods across numerous clinical contexts, rendering the literature unsuitable for a “Cochrane-style” systematic review. Instead, a narrative scoping review was undertaken to report the full breadth and diversity of literature.<sup>23</sup> A narrative review addresses concerns that reliance on evidence generated solely from systematic reviews, which expressly filter out contextual influence and human factors, that are of key importance to understanding speaking-up, may give partial, or worse misleading, information on which to base decisions and improve practices.<sup>24</sup>

The initial review question was “What are the experiences of radiographers in speaking-up about safety concerns?” This was broadened to speaking-up among healthcare professionals once an initial evidence scope revealed a dearth of literature from radiography. The scope was further extended to include speaking-up in non-healthcare fields in Africa due to very limited literature from healthcare in Africa. Given the scarcity of research studies and consistent with the adoption of a narrative review approach, a decision was also made to include all research studies on speaking up, regardless of research quality.

A systematic search of the literature was undertaken via SCOPUS, Medline via Ovid, CINAHL and Web of Science databases. Additional literature were derived from government policy papers, references from retrieved articles and the most relevant academic journals. The search was not restricted by time or geography however, only documents published in English were considered.

Search terms used in combination were speak-up, speaking-up (and related terms whistleblowing, raising concerns, raise concerns, voice concerns, voicing concerns); patient safety; radiography, radiographer, radiology (and international variants medical imaging technologist, radiologic technologist). Initially titles and abstracts were reviewed by IT and overseen by AJ. The final number of accepted papers were identified and subjected to a full text review again by IT with AJ & DK overseeing the process.

### Results

The 63 included citations illustrated in Fig. 1 consisted of 48 research papers, eight literature review papers and seven commentaries published between 1985 and 2020. Table 1 demonstrates that speaking-up has gained significant international interest.

The majority of papers originate from westernised and/or higher resource health systems, with only four papers from Africa, reinforcing the view that studies investigating speaking-up are rare in non-western cultures and resource-constrained systems.<sup>12,25</sup>

All four papers from Africa focussed on whistleblowing in non-healthcare areas. Two papers from Ghana focussed on combatting corruption/illegality in public administrative sectors,<sup>21,26</sup> with no literature found exploring speaking-up in healthcare. Table 2 characterises the professional groups covered in the 48 included research papers.

Only two studies focussed on radiography settings. Both addressed questions regarding the perceived culture of incident reporting within the radiography workforce in Canada and the

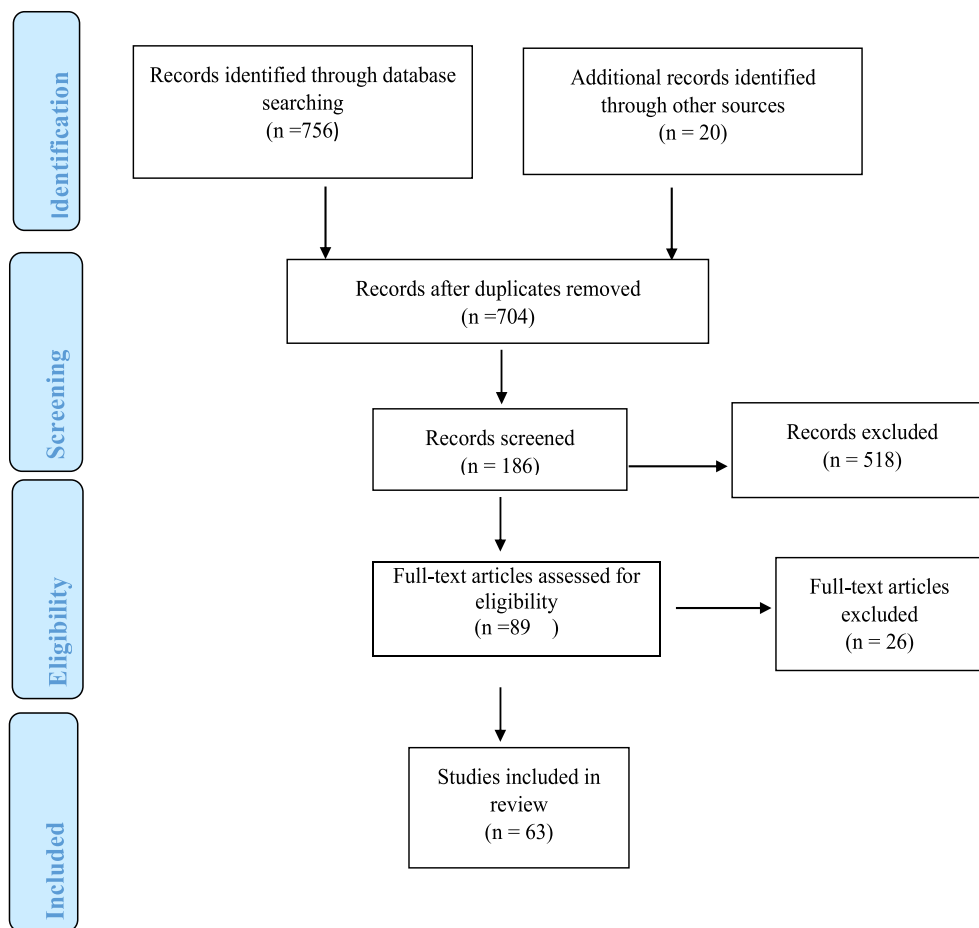


Figure 1. PRISMA flowchart summarising the results of the scoping review.

Table 1  
Origin of included studies (n = 63).

Origin of included studies (n = 63)	Number	Percentage (%)
Africa	4	6
Asia	9	14
Europe	23	37
Oceania	6	10
North America	21	33

Table 2  
Professional groups covered in included research papers (n = 48).

Category	Number	Percentage (%)
Practising nursing & nursing students	19	40
Practising doctors, residents & medical students	10	21
Nurses and doctors only	7	15
Public sector administrative staff	2	4
Multiple healthcare professionals	8	17
Radiology staff (therapy and diagnostic)	2	4

USA, rather than acts of speaking-up about safety concerns.<sup>27,28</sup> Of these, one was a retrospective survey involving all radiology staff at an academic hospital,<sup>28</sup> the others comprised of surveys comparing error reporting among radiation therapists across Canada and the United States.<sup>27</sup> However, given the major gaps in the radiography literature internationally focussing on safety culture and speaking-up, the decision was made to include both studies in this review.

Several studies identified barriers and enablers confronting healthcare workers who might wish to speak-up, which were grouped into sub-themes (Table 3).

*Workload and workforce conditions*

In working environments where high demand for services exist, patient safety can be threatened<sup>29,30</sup> and consequently the need for speaking-up is heightened. Individuals who voice their concerns in a positive way are usually more satisfied with their jobs and workplace conditions, and tend to make more attempts to speak up.<sup>5,31,32</sup> Some papers indicated that healthcare professionals who perceive a heightened sense of responsibility towards their clients/patients are more likely to speak-up on their behalf and that speaking-up behaviours among healthcare professionals are influenced by the extent of identification with their positions as clinicians or professionals.<sup>7</sup> Furthermore, literature review demonstrates that healthcare professionals who voice their concerns usually do so because in doing so they believe they create a safer environment for patients and staff.<sup>5</sup>

*Perceived efficacy of speaking up*

Understandably, healthcare workers feel more encouraged to speak-up when they believe their concerns are going to be heard and addressed by the organisation.<sup>33,34</sup> Findings of an investigation into why employees of Ghanaian public institutions refuse to blow the whistle on corruption and fraudulent activities, despite statutory

**Table 3**  
Barriers & Facilitators Sub-Themes to Speaking-up in Healthcare.

Workload and workplace conditions	Demand outstripping staff availability and resources <sup>29,30</sup> (barrier) Job satisfaction and role identity <sup>5,31,32</sup> (facilitator)
Efficacy of speaking-up	Lack of managerial response to concerns & associated sense of futility <sup>26,33,34</sup> (barrier)
Workplace culture	Cross and intra-disciplinary hierarchies <sup>10,40,41</sup> (barriers) Perceived/actual risk of detriment following speaking-up <sup>7,28,35–39</sup> (barriers) Professional codes of conduct promoting workplace culture of speaking-up <sup>5,40,51</sup> (facilitator)
National culture and societal norms	Social norms relating to deference <sup>9,53,55–58</sup> (barriers) Fear of spiritual attacks <sup>26</sup> (barriers) Multicultural/diverse workforce makes it more difficult for workers to interpret norms <sup>53,54</sup> (barriers)

protection, revealed perceptions that concerns would be disregarded by the relevant authorities.<sup>26</sup> The likelihood of the act of speaking-up is, therefore, directly dependent on being heard and responded to.

#### *Workplace culture & the perceived safety of speaking up*

Workplace hierarchies were commonly identified as a significant barrier to speaking-up among healthcare workforces, as perceptions of hierarchy tend to inhibit speaking-up due to fear of personal detriment<sup>7,28,35–39</sup>. Speaking-up behaviours of healthcare professionals could also be affected by cultures within specific professional groups.<sup>10</sup> For example, while medical doctors tend to informally raise concerns within their group rather than recommended institutional reporting mechanisms, the nursing profession has been associated with a culture of conformity to guidelines and regulations.<sup>40</sup> While nurses who withheld voice on wrongdoing felt an equal sense of responsibility towards their patients, colleagues and employer; those who raised concerns did so believing that it was a privilege to do so in their role as patient advocates.<sup>41</sup>

International literature suggests that workplace cultural issues related to workers' fear of retribution and detriment following speaking-up are significant barriers to future speaking-up behaviours.<sup>42,43,44,45,25</sup> The retribution feared by workers' include a range of actions by colleagues, such as losing their job, being disciplined or being stripped of their professional license and legal liability to practice.<sup>7,38,42,43,46–49</sup> These findings are also consistent with the two studies conducted on radiography staff in the USA and Canada, which both reported fear of professional punishment as a barrier to speaking-up about safety compromises.<sup>27,28</sup>

The limited literature from Ghana similarly demonstrates that one of the reasons for withholding voice on fraudulent activities in public institutions is the fear of harm towards the whistle-blower (dismissal, suspension, transfer against a person's will, intimidation and harassment).<sup>26</sup> Evidence from Nigeria also suggests that fear of retaliation, fear of loss of job and social stigma are the main barriers to the practice among bank employees.<sup>50</sup> However, there is a lack of evidence from African healthcare systems on this matter.

A number of studies suggest that the existence of professional codes of conduct and standard procedures are a positive predictor of speaking-up behaviours.<sup>40,51</sup> For example, the existence of workplace policies and managerial support have been demonstrated in international and African literature to facilitate speaking-up behaviours.<sup>5,50</sup> In NHS England, initiatives such as the National Speaking-Up and Whistleblowing Policy and the introduction of Freedom to Speak-Up Guardians has also had some positive impact in supporting and encouraging raising concerns in the workforce, although the impact has been variable across England.<sup>52</sup>

#### *National and societal culture*

Studies from the USA, South Korea, Japan, UK, and China strongly suggest that national cultures can be a significant barrier

to speaking-up. For example, in Japan and Korea the strong societal norms of deference make it rare for people to challenge each other publicly, and could make speaking-up problematic for health professionals, even when they witness patient safety compromises.<sup>53,54</sup> Given the 'multi-nationality' of the healthcare workforce in many countries, it is imperative to be aware that health professionals may, both individually and collectively, share diverse societal norms and beliefs about speaking-up.<sup>9,53,55–58</sup> Although a multicultural workforce provides potential organizational gains with respect to diversity, cultural differences can serve as a barrier to employee voice because it is more difficult to identify and interpret norms for the workforce voice.<sup>59</sup>

A unique finding in the literature reviewed here was the research from Ghana that identified a barrier to whistleblowing being 'fear of spiritual attacks',<sup>26</sup> or the use of supernatural powers to cause harm to a targeted individual. Spiritual attacks reflect deeply held belief and fear of superstitions in Africa, including the belief in witchcraft; specifically, juju, suspicions, ghost, sorcery, ancestors, necromancy, gods and black magic.<sup>60</sup> These attacks may result in unexplained illnesses, among other misfortunes. A July 2013 Ghana News Agency story suggested that after a person blows the whistle, his/her identity could be revealed spiritually even if there is corporeal protection. The report outlined the depth of fear linked to spiritual attacks, describing one person's view that they preferred "to accommodate corrupt officials in my community and have my peace than to report them and go through hell on earth".<sup>26:p4</sup>

These beliefs have resulted in many citizens of the African continent experiencing trepidation about speaking-up (although not isolated to this) by virtue of their belief system.<sup>60</sup> This highlights that the concept of speaking-up cannot be properly investigated without taking into consideration workers' societal culture, norms and beliefs.<sup>10</sup> Cultural beliefs of a nation influences speaking up behaviours. However, the 'fear of spiritual attacks' is a novel concept that is not discussed in the speak-up literature, which is largely westernised.

#### *Discussion: lessons for radiography practice in Ghana, and beyond*

The following lessons for practice are grounded in the preceding review of the literature and have not been evaluated in empirical research. One of the many challenges confronting radiographers who value workplace cultures where speaking-up is an accepted part of the job, is that healthcare staff who speak-up often suffer deterioration in their relationships with their peers, irrespective of whether the concerns reported are genuine and legitimate. Jones and Kelly<sup>33</sup> suggest that staff consistently voiced their concerns despite barriers to speaking-up but getting someone to listen and then act appropriately could be problematic. A common perception in the literature, therefore, was that speaking-up is a 'high risk, low benefit activity.'

We recognise that some radiographers work in organisations that have robust mechanisms to ensure staff speaking-up are



responded to in an appropriate manner. However, others may be operating in organisations displaying characteristics consistent with the 'Deaf Effect', a term originating in management literature<sup>61</sup> to describe the reluctance of senior managers to hear and to act on challenging observations from lower down the organisational hierarchy. A key contribution from this review is, therefore, that a favourable workplace context, where radiographers are more likely to speak-up, is one where management are perceived to be willing to listen and act, the culture is seen as supportive and there is relatively little fear of negative consequences.

A number of studies<sup>40,51</sup> suggest that a further factor in developing a culture of speaking-up was the existence of professional codes of conduct and standards that promote it. The existence of several national and professional policies in, for example, the UK contrast sharply with the current realities in the Ghana health system. The UK Code of Professional Conduct for the Society of Radiographers clearly stipulates guidelines for raising concerns or speaking-up about safety issues.<sup>62</sup> Unfortunately, the Code of Conduct for the Ghana Society of Radiographers (GSR) has no such equivalent stipulations or guidelines.

Of particular relevance to patient safety is the problem of excessive workload, staffing shortages and the deleterious effects on workforce morale, all of which were identified as barriers to speaking-up. The global shortage of healthcare workforce is acutely reflected within radiography, with the continual rise in demand for radiography services and workforce shortages with a lack of both radiographers and radiologists being well documented.<sup>63</sup> Whilst workforce shortages are a global issue, they are felt acutely in Ghana and other resource-constrained countries. For example, there are currently 350 registered radiographers in Ghana serving a population of 31.07 million, a ratio of radiographers to the population of 1–88,771. This is in stark comparison to the UK, where a total of 33,789 radiographers serve a population of 66.8 million, at a ratio of 1 to 1,980.<sup>64</sup>

Ghanaian radiographers clearly have a major task in addressing rising pressures of healthcare demand in an increasingly complex field of practice where staff morale, patient safety and speaking-up require promotion and protection. Evidence suggests that Ghanaian radiographers are generally dissatisfied with their jobs due to challenges such as excessive workload, poor salaries, staff shortages, role conflicts, poor physical working environment, non-utilisation of radiographers' skills and abilities and experiences of radiographers concerning workstation practices such as manual controlling of equipment.<sup>65,66</sup> An added issue in Ghana and other countries with low numbers of registered radiographers, is that the small numbers of radiographers working within a hospital, or clinic, may increase the risk of being identified following speaking-up, even if the concern is anonymised. In turn, being identified as someone who speaks up increases the perceived risk of retribution by colleagues.<sup>27,28</sup>

The development of a speaking-up or whistleblowing policy by the Ministry of Health is imperative in promoting speaking-up behaviours among radiographers in Ghana and in effect the entire health workforce. The health system in Ghana also needs to increase efforts targeted at improving patient safety by drawing on the voice of radiographers and others health workers across the country. For example, a national policy and regulation programme which includes provisions, resources and guidelines for speaking up within regional and local healthcare system will provide a sense of direction and ultimately improve patient outcome and staff wellbeing. The Code of Ethics currently being revised by the Allied Health Professions Council (AHP), the regulatory body for training and practice of allied health professions in Ghana, provides a valuable opportunity to raise awareness of the need for regulations and guidelines to encourage a 'blame-free' working environment,

where healthcare professionals can confidently speak-up about safety concerns without fear of punishment or harassment.

The curriculum for training of radiographers, which currently presents nothing on speaking-up related topics should include speaking-up training and interventions, as this would help to instil the attitude of questioning the norms and practices in newly qualified radiographers before they are posted for practice. Addressing the gap in evidence and knowledge about speaking-up is also imperative, with more research urgently needed to investigate the realities and experiences of speaking-up behaviours by Ghanaian radiographers.

## Conclusions

This paper demonstrates that while 'speaking-up' is a topic that has gained international interest. However, most studies are focussed on nursing and medical practice and mostly overlook other healthcare professions, including radiography. Most studies are also undertaken in higher income and westernised health systems, with the concept of speaking-up in healthcare in Africa and Ghana remaining unexplored. This is a significant gap, as the culture and practice of speaking-up currently explored in the literature may be different from the norms and cultural beliefs in African countries, such as Ghana. It cannot be assumed, therefore, that speaking-up experiences documented in the literature are transferable to the Ghanaian cultural context, or other low or medium income countries.

Speaking-up is also a topic that has been largely overlooked by policy makers, both within healthcare generally and specifically within radiography in Ghana. Although the updating of the Code of Ethics suggests that change may be on the horizon, it is unclear whether the relevant policy and regulatory bodies are aware of the importance of speaking-up in ensuring patient safety, or aware of the serious issues related to workload and workplace cultures which risk routinely undermining safety and safety-related behaviours such as speaking up. It is not possible to achieve patient safety where there are no systems to address workers' concerns. Routine delivery of unsafe care associated with a healthcare workforce lacking in voice could severely undermine Ghana's ambitions to deliver a high-quality health care system and Universal Health Coverage (UHC) in the future.<sup>67</sup>

## Conflict of interest statement

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