

Using Ghana's Alternative Medical Healthcare Practice Act 2000 (Act 575) to Evaluate Doctor-Patient Relationship and Medical Negligence Issues Arising from Integration of Artificial Intelligence in Healthcare

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DOI: <https://doi.org/10.55145/ajbms.2024.03.01.013>

Received November 2023; Accepted January 2024; Available online January 2024

ABSTRACT: This study examines the necessary changes in Ghana's medical negligence law which governs artificial intelligence (AI) pilots in hospitals to preserve the doctor-patient relationship and address the liability gap by reviewing Law 575, examination of case law. Combined with lessons from Nigerian hospitals and the global literature, practical recommendations result in acceptable changes, provider responsibilities are renewed, patient advocacy in automation Contributions include modeling legal language for maintaining standards of care, limiting algorithmic harm, and advising emerging AIs on diagnosis or treatment. The need for transparency of equipment and current pilots calls for an update to Rule 575 sooner rather than waiting for crimes to occur. Emphasis is placed on the potential of clinical leaders and policymakers.

Keywords: Medical Law, Artificial Intelligence, Informed Consent, Medical Negligence



1. INTRODUCTION

The Ghana Alternative Medicine Healthcare Practices Act 2000 (Act 575) outlines standards of care for patients seeking treatment, services and rights of doctors. Advanced technology (AI) is being tested in Ghanaian hospitals to assist for diagnosis and medical decisions arise through AI [1-5]. This study will examine pharmacists' responsibilities in light of the emergence of AI tools in the Ghanaian workplace and the changes in Regulation 575 requirements for informed consent. While the widespread use of AI diagnosis and monitoring apps has shown early promise, treatment-recommending applications need careful direct validation to avoid the algorithm loss observable around the world [6][7]. In Ghana, new standards balancing innovation efficacy and safety are needed due to clinical reliance on AI that lacks absolute transparency [8-10]. By examining the Ghanaian case of medical negligence in the wake of Act 575, this study will provide practical guidance in strengthening doctor-patient trust and establishing provider accountability through AI a extended use. Proposed contributions include recommendations for amendments to Rule 575 to address identified risks and a consent model that enables patients to make informed, shared decisions on AI a about getting involved. Figure 1 shows the most important digital health technologies.

The main research objectives are:

- To analyze the existing provisions of Rule 575 regarding the role and liability limits of physicians in the emerging AI tools.

- To assess patient rights concerns and consent requirements given concerning automation and dehumanization; and
- To recommend changes to Act 575 and hospital policy reforms to reduce the risk of negligence related to AI and maximize benefits.

Balance goals and strategies in integrating rapid technology while maintaining patient welfare and provider responsibility in accordance with Ghanaian legal and ethical standards:

Practical Significance

In the midst of the AI boom, this criminal and ethical analysis of Ghana’s clinical negligence law has immediate and concrete applicability. As autonomous technology plays an increasing role in critical diagnostic and therapeutic approaches, coordinating services and supporting opportunities for the affected individual is paramount. Checking Act 575 provider responsibility variety by risk of artificial intelligence, loss assignment, and physician rotation activities. Changing negligence claims, requiring AI audits, and counseling to disseminate patient information before device use protects sales for current pilots by actively enforcing Rule 575 instead of waiting for activity a on top of harm, patient interests are served as innovation occurs responsibly. Healthcare facility leaders and policy makers at the local level benefit from useful indicators based on the literature and actual global technology integration practices.

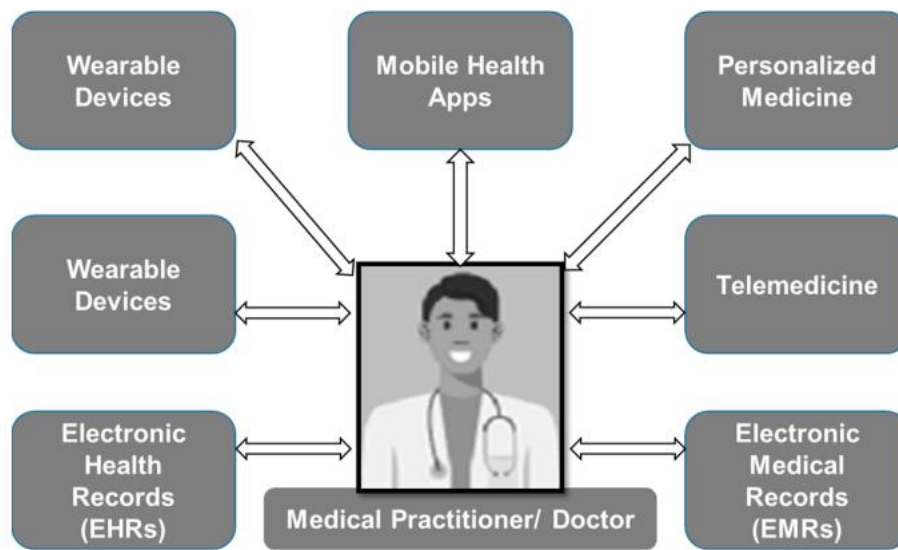


FIGURE 1. - The most important digital health technologies [17]

Scientific Contributions

Although there are previous legal studies worldwide as compared to AI legal liability regimes or proposed combinations of fashions, this looks and contributes particularly to Ghana's Act 575 for modernizing for the automation era with scientific health professional asserted and algorithmic harm assessment. Highlighting behavioral opportunities affecting their retention in the growing generation as a significant downward trend, they offer a groundbreaking analysis to provide a clear increasing demands for care and automated liability mechanisms have become clear. The prediction of additional bite consent fills a research gap regarding the nonhuman consequences of AI and the need for associated safeguards. Finally, supported reporting requirements and parameter settings for responsible use of AI programs contribute to program oversight lacking in existing AI codes of ethics.

2. METHODS

This study presents an integrated legal approach that includes legal standards, comparative case management, legal analysis, extrapolation theory from secondary literature, and policy considerations. Ten of physician liability based on primary research contained in the Ghana Codified Alternative Medicine and Health Care Practice Act 2000 (Act 575). of the Rachar And delimiting, a strong frame of reference of emerging technology is revealed by comparing case law guidelines applicable to scientific negligence in Ghana—then Law 575 sets standards changing emphasis on oversight and liability prevention with the help of appropriate courts to initiate AI.

Incorporating perspectives from the Nigerian workplace is already a set of rules and tools to support the use of information, while lessons from an important secondary literature on stakeholder impact have globally allows to isolate Ghana’s clear development for AI in healthcare. Ethical interventions by experts from evidence-based on consensus and topic strengthen integrated research [11]. This mixed-methods prison sees systematically analyzed current regulations, contemporary forecasts, real-world trends, and commercial activities, requiring caution and human waste concern types

of transfer of emerging scientific technologies to allow customization to a growing variety of contexts. Emphasis on reference baseline legal guidelines prior to technology integration combine to provide framework transferability.

3. RESULTS AND DISCUSSIONS

3.1 Doctor-Patient Relationship Impacts

A. AI Assisting Doctors with Diagnoses and Treatment Plans

Ghana's fast piloting of AI technology to resource health practitioner selections makes scrutinizing physician-affected person dating evolutions imperative in keeping with Act 575's emphasis on welfare, care standards and stopping abuse (s1(c),(e)). As algorithms suggest diagnoses, highlight symptoms in scans, are expecting deterioration danger, and more and more recommend medicines or techniques, advantages and risks each rise up.

1. Benefits of More Accurate, Data-Driven Care Recommendations

Applied well, assisted AI promises greater accurate diagnoses and personalised treatments versus sole human obstacles, preventing overlooked signs and constructing on complete population facts. Ghana's Korle Bu Teaching Hospital decreased mortality and headaches by means of 11% in one year participating with an American AI firm scanning retinopathy instances the docs then acted on. Literature shows as much as forty% diagnosis boosts, while device gaining knowledge of detected diabetic instances with ninety five% accuracy as opposed to forty two% for doctors in a Ghana trial [5]. Act 575's care standards duties propose thoroughly integrating such technologies advancing patient well-being (s2(1)(e)).

2. Risks Related to Devaluing Doctor-Patient Interactions

However, an undue reliance on AI over physician judgment risks undermining Act 575's programs and patient support. Literature suggests that AI changes provider interactions by providing more remote or infrequent care with more physician distraction [11], while nurses in India reported that patients who have followed AI explore technological interfaces 60% of the time. A warning from the Ghana Medical Association on AI also highlights the risk of deflation [7]. Regulation 575's strict prohibition on misconduct requires ongoing enforcement that the diagnosis is complementary to, not hinders, compassionate care (s1(1)(d)).

B. AI Partially Replacing Human Doctors

The longer-term trajectory of AI not just assisting but fully conducting key diagnostic and prescribing processes raises additional relationship concerns.

1. Loss of Human Connection and Emotional Support for Patients

While AI has achieved doctor-degree accuracy on specialist exams [12], completely automatic interactions forfeit emotional aid. Literature indicates sufferers want human over AI advice even at lower accuracy prices given empathy dreams [13]. Patient surveys in Ghana additionally decide on health practitioner relationships, consonant with Act 575's care requirements (s2(1)(e)), whole replacement risks may also require updated misconduct sanctions (s1(2)).

2. Potential to Undermine Trust and Satisfaction

Relatedly, the affected person relies on remedy and satisfaction — supported at once by Regulation 575 (s2(2)(a)) — reducing its AI against human signals in a global context of the types studied Algorithmic errors or losses involved take into account the violation immediately affecting the individual [14][15]. This means that consent and transparency protections should be strengthened as automation increases, in accordance with the obligations enumerated in Regulation 575 (s2(1)(f)). Ongoing validation is appropriate to avoid physician relationship breakdown.

In summary, assisted and autonomous AIs do not automatically improve physician relationships or meet patient preferences for human interaction. As the influx of equipment accelerates in Ghana, the integrity, misconduct, and ethical requirements of Act 575 require continued emphasis to prevent human waste: With acknowledgment of caution, policy approval, and people who enhance and support welfare care standards. The AI Approach may require a review of misconduct policies and transparency requirements.

3.2 Medical Negligence Issues

As AI influences or replaces aspects of diagnosis and treatment processes, medical negligence questions arise regarding accountability for errors and overreliance harms per Act 575 standards (s1(1)). As automation increases, determining culpable parties and modernizing evaluation criteria for AI usage responsibly are crucial.

A. Liability Questions with AI Errors or Harms

Act 575 currently binds registered medical practitioners and facilities to negligence liability for substandard care harms (s16). But the involvement of developers in creating algorithmic tools complicates determinations.

1. Is the Developer Responsible or the Hospital/Doctor Using It?

Debate arises as to whether engineers or service providers bear responsibility when AI-assisted treatments show harmful or abnormal pathways Ghanaian lawyers highlight the challenge of implementation when problems arise from "black-box" systems is emphasized, because algorithmic logic belongs to the developers.

But the case law in the U.S. and India suggests that organizations have greater responsibility in implementing decisions than just the instrument manufacturer. Thus, standards of care review may still be highly relevant to clinical

applications of procedures. Amending rule 575 language regarding AP processing negligence and minimum attestation requirements could strengthen due process audits by increasing automation.

2. Can AI be Validated Enough to Determine Causes?

However, it is debatable whether the AI's validation adequately proves why the errors occurred and whether that indicates negligence. Although instruments can be tested for accuracy, the root cause is less obvious in machine-generated images than in human diagnostics. This creates difficulties in assessing whether reasonable discretion has been followed.

Rule 575 may require new policies that enforce AI audit methodologies, analytical requirements, and accuracy baselines to maintain audit objectives as automation increases. Determinability in the implementation of Ghanaian policies requires further research.

B. New Challenges for Evaluating Standards of Care

The advent of augmented and potentially autonomous AI likewise creates open questions regarding responsible usage criteria and the effects of over-deferring to algorithms on care standards.

3. Criteria for Responsible Use of AI Technologies

While Regulation 575 obliges registered pharmacists to exercise the "skill, care, knowledge and skill" required of pharmacists in relation to the health profession standards (s16(1)), an emerging recurring AI toolkit formulate those diagnostic criteria and responsible use of medications fit new guidelines Global Ethical recommendations suggest That people should always be kept in the loop for acceptance, and consumption first limits AIs to a small application initially, subjects them to extensive testing for bias, and requires developers to explain any problems

Such precautions may need to be spelled out in negligence policies to reflect increased duties of care in the use of AI. Requirements for ongoing validation and actions that avoid over-reliance can support standards of care in automation.

4. Impact of Over-reliance on AI versus Human Judgment

When providers overestimate the delivery of AI without referral, it results in compromised standards of care. Case studies show algorithms recommending uncontrolled opioid use, mistakenly stopping infusions, or suggesting false heart disease risk. While AI analyzes the misses of adverse events and drug interactions in humans, there is now a decision gap.

Updating Rule 575 to mandate approval review prior to processing automated recommendations could prevent excessive loss of confidence by expanding automation. Negligence, defined as uncertificated use and excessive deferral, reinforces the standards of accountability. Specific research for explicit AI to support wellness goals will require continued review as technology evolves.

In overview, the automation encouraged under Regulation 575 encourages complexity to promote accountability, avoid algorithmic losses, and continue to consider reasonable dependency levels. Strengthening provisions for transparency, accountability, supervision, and pending limitation of safety assurances encourage responsible development within the negligence limit.

3.3 Evaluating Act 575 for AI Healthcare Integration

A. Applicability of Duties and Rights Enumerated in Act 575

Ghana's medical negligence legislation outlines several foundational responsibilities for safe, ethical care applicable to AI integration debates. Per Act 575 Section 2, Registered medical providers and facilities owe families duties to exercise "reasonable skill and care", consider welfare impacts in care choices, uphold professional ethical codes, gain informed consent for treatments after disclosing risks, and maintain patient dignity and connections during vulnerable treatment periods (Act 575, 2000). These principles around skill levels, welfare-centric judgment, consent and rights dignity and autonomy provide latitude for ensuring AI adoption that augments but does not contravene healthcare standards and ethics.

Specifically, the provisions suggest ongoing reasonable care judgment by doctors must supervise algorithm usage, while transparency and consent procedures must fortify surrounding automated advising now influencing diagnoses and medications. The established rights serve as guideposts for technical integration.

B. Legal Gaps Related to AI Use and Accountability

However, regulation 575 lacks specific language on what constitutes safe and transparent AI consent that preserves standards of care. There is a lack of reliability-focused implementation guidelines for innovation. According to the literature, algorithmic costs and computational gaps have become increasingly apparent through uncontrolled applications to global health after the fact, highlighting the need for proactive protection and modern language.

Many systems in automation need to be expanded. Perhaps the "reasonable skill and care" expectation needs updated language in the certification and limitation of AI tools claims. Consensus statements deserve explicit changes to cover algorithms that advise different risks for specific clinical risks. The negligence liability language was to be strengthened in relation to a responsible reliance. The amendment of Part 1 Annex Professional Codes is also valid to cover the AI Practice Guidelines. Without modernizing accounting systems and prioritizing transparency, Act 575 principles may not effectively serve patient interests.

C. Recommendations for Updates

We propose the following amendments to Act 575's duties, codes of ethics and negligence liability by Parliament and health regulators to balance innovation with safety [16]:

1) Enumerate an "affirmative duty" for doctors and hospitals to validate AI tools including monitoring for biases before clinical usage per the reasonable standard of care. Require satisfying explainability thresholds.

2) Mandate new citations in Professional Medical Codes annex directly addressing responsible and restricted AI usage to reinforce skill standards.

3) Add language expressly requiring advanced informed consent discussions covering AI involvement, tailored to application types and risks. Address algorithmic opacity concerns impairing consent.

4) Extend medical negligence language to cover improper usage or over-reliance on AI tools relative to human judgment skills expected per standards of care. Require concurring review of all automated recommendations.

Updating Act 575 can pave the way for accelerated, transparent automation. The harm prevention emphasis will further the welfare aim in S.1 while supporting innovation.

4. CONCLUSIONS

A. Summary of Doctor-Patient and Negligence Analysis

Given the growing role of synthetic intelligence (AI) in public hospital research and drug selection, this criminal investigation of the Ghana Alternative Medical Healthcare Practices Act 2000 (Act 575) shows promise and caution to follow the ethical requirements of care. Relationship and impact assessment Rule 575 aligning innovation with the well-being of individuals affected With significant remote sensing means. However, innovation is needed to meet unique automation threats including liability related to machine errors, accounting biases that degrade companies, human relations and disrupted decision making in the case of AI overestimated internally, and barriers to reasonable disapproval in methods of receiving automated AI assisting in the Inside the Rule 575 programs to be evaluated, have requirement clarifying the types of negligence that are occurring, failure to enforce reliability assurance limits, imposing codes of ethics for algorithms, and the need for high-quality procedures consents detailing AI involvement will appear Proactively updating regulation can enable measured growth.

B. Final Policy Recommendations and Priorities

We conclude that Parliament has prioritized amendments to Executive Order 575 in order to accelerate the successful integration of AI in all areas of diagnosis and treatment, in an effort to maintain opportunity and in the safety of affected individuals. The amendment should involve requirements for due diligence prior to validation, restrictions on use by users, more desirable codes of ethics for protecting algorithms, and negligence claims modernized to hold companies accountable for overconfidence or exploitation without evidence of benefits relative to risks.

Passing such amendments in 2023 even as usages stay in large part assisted nowadays gives the proper timeline for figuring out Act 575's welfare ambitions within the automation age, stopping adverse occasions through proactive governance. We advise growing implementation steering for hospitals concurrently detailing AI audit log renovation, tracking, and restricting tactics according to the up-to-date regulation.

Funding

None

ACKNOWLEDGEMENT

The authors would like to thank the anonymous reviewers for their efforts.

CONFLICTS OF INTEREST

The authors declare no conflict of interest

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