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Analysis of Online Media on Social Inclusion in Maternal Health Discourse

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Abstract. Maternal health is one of the priorities for many governments across the globe and is included in the Development Millennium Goals of the United Nations. Governments in developing countries and development agencies are also adopting the maternal health in their development agendas. The media plays a major role in promoting innovative interventions like maternal health. The media is important in construction of social reality and may inform the public and policy makers on decisions related to maternal health. This paper reports on the analysis of online media on social inclusion to the discourse for maternal health. The study focused on the case of Malawi as an example of a low income country facing challenges on maternal health. The study employed Critical Discourse Analysis on online media reports to bring to light issues on alienation in participation on maternal health discourse. Using Habermas' Theory of Communicative Action as a theoretical lens, the study analysed the validity claims on maternal health. The analysis showed that (i) the media mainly reported on issues on the supply side of maternal health (ii) other members of the society who are indirectly affected by maternal health were excluded from the maternal health discourse. The study recommends promoting awareness of maternal health to all members of society through online media and inclusion of the marginalised participants to the discourse. A further study is recommended on the effectiveness of online media focusing the demand side of maternal health.

Keywords. Online media, maternal health, critical discourse analysis, Malawi

1. Introduction

Maternal, newborn and child healthcare may be described as "a comprehensive trajectory for health of women and children beginning with adolescent/pre-pregnancy to postpartum and maternal phase of the mother" [1:1092]. Maternal healthcare covers services for adolescent and pre-pregnancy, pregnancy, birth, postpartum (neonatal/postnatal) and maternal childcare (infancy through childhood). Maternal health care services are provided during these phases to ensure well-being of the mother and child [1]. Effective maternal healthcare services are crucial for the survival of the mother and the newborn child [2].

The services for maternal health care includes medical response, point of care support, health promotion, immunization, prenatal care, infant and mother monitoring, pregnancy tracking and referral to health facilities [1, 3]. However, in developing countries provision of the maternal health services is problematic and this has resulted in high maternal mortality rates [3].

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Issues relating to maternal health have become a major concern for developing countries and International development agencies. One of the reasons in focusing on maternal health is to achieve Millennium Development Goals (MDGs) relating to health [4, 5]. MDGs targets 4 to 6 addresses health issues which are aimed at reducing child mortality, improve maternal health, combating HIV/AIDs, malaria and other diseases [6]. The MDGs are to be achieved by 2015. Consequently, developing countries are aligning their development strategies related for maternal health to attain the MDGs [5, 7].

Information and Communication Technologies (ICTs) are important in facilitating communication and sharing information among stakeholders for maternal health and the society [8]. The maternal health stakeholders are government officials, health workers, donors, politicians, beneficiaries and local leaders [9]. One of the examples of ICTs is online media where various issues for maternal health may be reported and discussed. We argue that media is significant in social construction of reality where concepts, public reason, rationality, opinions and rules may be produced and reproduced [10, 11]. Conversantly, online media support social construction of reality.

De Brun at al. [12] also suggests that media represents a significant source of social force which influences peoples knowledge and behaviour. Media may shape individuals perceptions on social issues such as maternal healthcare and how these issues affect their lives. The stakeholders in maternal healthcare such as policy-makers and donors can be aware of problems that are affecting the beneficiaries for maternal health care. Problems on maternal health can be deemed important through coverage in the media and can be presented in policy agenda for maternal health care [12]. It is important that all members of the society participate equally in the maternal health discourse in democratic societies [9]. The study is guided by the following research questions:

- How are online media securing social inclusion in maternal health?
- Who is included or excluded in the online media on maternal health?
- What can be done to improve social inclusion in maternal health using online media?

To answer these questions the study employed Habermas' Theory of Communicative Action (TCA) [13] to show how online media was securing inclusion on maternal health and establish actors participating in the maternal health discourse. TCA was considered ideal because it supports analysis of text which represents communication. Communication forms part of the everyday life where citizens participate in discourses that affect their lives in democratic societies. Through critic of media discourse using TCA, issues of domination, alienation and power relations may be brought to light and members of society can take corrective action [10, 11].

The rest of the document is presented as follows. Section 2 summarises literature on maternal health and context of the study. Section 3 outlines the theoretical background to the study. Section 4 highlights the research methodology. Section 5 summarises the results for data analysis. Section 6 discusses the results and conclusions from the study.

2. Background to the study

Majority of developing countries are facing the challenges for high maternal deaths. It is estimated that 99% of maternal deaths occurs in developing countries [14]. This has resulted in government adopting strategies for reducing deaths of women during pregnancy. Some of the challenges related to maternal health in developing countries contexts are inadequate resources i.e. financial, skills, equipment; ineffective referral systems; distance to local health facilities especially in rural areas; and lack of access to data on maternal health to support decision making [15]. Governments and developments agencies have adopted strategies and interventions to address the challenges for maternal health. In Malawi, such interventions include the Maternal Health and Safe motherhood initiative by government. The next sub-section presents the background of maternal health in Malawi.

2.1. Maternal health in Malawi

Malawi has a population of about 15.3 Million people [16] with the majority of the populations (about 87%) living in rural areas. The country depends on agriculture for its economy and had a Gross National Income of US$753 and life expectancy at birth of 54.2 years [17]. Malawi has maternal mortality rate of 1140 per 100 000 live births [14]. The high maternal mortality rates is attributed to several factors such as long distances to health facilities in rural areas which results in delays, lack of adequate skilled staff, drugs and equipment and the effects of HIV/AIDS [4].

Government through the Ministry of Health is the main provider of health services in the country. The health services are delivered through clinics, health centres, district hospitals and central hospital across the three regions (north, centre and south) of the country. Referral system is used when there are cases which cannot be treated at the lower level health facilities. There are also private healthcare providers such as Non-Governmental Organisations (NGOs) and mission hospitals registered under Christian Association of Malawi [4]. Traditional birth attendants (TBA) and traditional healers also provide maternal care services.

2.2. Stakeholders in maternal health

Apart from healthcare providers, other stakeholders in maternal healthcare are donors and international development organisation who provides support to interventions, private sector organisation such as health insurance companies, ICT and network providers, pharmaceutical firms, traditional leaders, politicians, policy-makers, the media and the general public [9]. Communication and sharing of information on maternal health among the stakeholders is important [18]. It is important to understand the role that ICT in maternal health so that appropriate mediums for communicating and sharing information among the stakeholders can be used.

2.3. ICT and maternal health

ICT have transformed many sectors of society including the way maternal healthcare services are delivered. ICTs are now essential in cost-effective maternal healthcare services delivery and utilisation which may result in improved the well-being of women and communities [19]. ICT such as mobile technologies, computers, databases, websites etc. may be used in maternal healthcare to provide the following services [19, 20, 21]:

- Access to health information and digital resources
- Electronic recording, storage information on maternal health
- Surveillance of maternal related diseases
- Communication and sharing of information

Specific to the internet, it can be used to provide information, sharing of experiences and learning on issues related to maternal healthcare [17]. Hall and Irvine [19] suggests that internet or online media can support maternal health beneficiaries to share strategies, exchange advice, establish relationships and save time especially where travel is restricted.

2.4. Inclusion and exclusion in maternal health discourse

Discourse can be defined as "institutionalised language codes used to articulate the social construction of reality" [22:89]. Similarly, discourse can be described as "a set of ideas and practices which conditions our way of relating to and acting upon a phenomenon" [23: 253-4]. Language forms part of the discourse and communication between participants can be analysed to establish inclusion and exclusion to a discourse [24].

Social inclusion and exclusion may occur in media discourse when certain stakeholders for maternal healthcare are privileged or deprived to participate in a discourse [25]. Some of the cases for inclusion and exclusion may be a result of social processes related to social institutions i.e. class, political power, economic structure, inequality and domination [26]. For example, those with political power may influence media reporting on social issues to their advantage and leading to marginalisation and deprivation of those with less power. It is important to critique media reports on maternal health care to bring to light the hidden assumptions and social injustices in a discourse [10, 26].

3. Theoretical background to the study

Theory of Communicative Action [13] can be used to explain the role of communication in human behaviour and social action [27]. Motives for communication leading to action can be categorised into: teleological, normative action, dramaturgical and communicative action. In communicative action use of language is aimed at common understanding between the sender of the message and the receiver of the message called ideal speech situation [13]. However, ideal speech situation is difficult to achieve because of communication distortions and utterances in the messages. The communications distortions may mean the messages are incomplete, not true and

lacking evidence. Validity claims may be used to assess the messages in the communicative interaction [27]. The four validity claims are summarised as follows:

- ***Truth claims:*** refers to the objectives and totality of situation for the communication. Truth can be assessed by establishing the falsehood or omissions in the communication;
- ***Sincerity:*** is the authenticity of the communication and can be examined is analysing the motives behind the communication;
- ***Legitimacy:*** is when communication conforms to the expected rules and norms for a given context of society. Legitimacy claims may be examined through analysis of participation in the communication to highlight equal participation or if some participants are privileged or side-lined;
- ***Comprehensibility:*** presents the completeness and clarity of communication. The validity claims for comprehensibility can be assess by checking violation of language rules, use of jargon that may lead to misunderstandings

One of the challenges for using TCA is that Habermas does provide a prescription on how to employ the theory. Others [10, 27, 28, 29] have operationalised TCA and provide guiding questions that can be used to test validity claims in a corpus. This study adopts the approaches used on media discourse analysis for two studies: (i) media reports on a mobile instant messaging application called Mxit [24] (ii) critical analysis of adoption of technology for education [10]. Using the description and key questions for the four validity claims we attempt to operationalise TCA in this study. Table 1 summarises the key questions for the four validity claims.

Table 1. Summary of validity claims

Validity claims	Description	Key question
Comprehensibility	Clarity of utterances for syntax and semantics	Is communication complete and intelligible?
Truth	Matching of what is said with reality and supported with facts	Is evidence provided for the utterance?
Sincerity	The intension of the speaker to be honest	Is communication consistent with the intensions of the speaker?
Legitimacy	Appropriateness of utterances according to socially accepted norms and values	Are all stakeholders included in the discourse?

Adapted from: Cukier et al., [10] and Chigona et al., [24]

4. Research methodology

The study employed Critical Discourse Analysis (CDA) to explore issues on inclusion on maternal health care discourse. CDA is defined as "deliberately probing the relations of causality and determination between (a) discursive practices, events, text and (b) wider social and cultural structures, relations and processes" [29]. In line with CDA the aim of the study was to probe relationships of causality and determinism of discursive practices, events and text on maternal health care reported online in the context of Malawi. CDA was considered ideal in revealing meanings of issues on maternal health in the media that informed the development of policies and interventions as part of society beliefs constructs. Further, CDA enabled the researcher

to analyse the issues of power relations that were enacted or legitimatised in the text by the dominant groups or institutions [29, 30, 31].

4.1. Approach to CDA

The study adopted the four steps for conducting CDA [22]. The steps are summarised as follows:

1. Define the corpus to be analysed
2. Analysis of content and coding of themes
3. Reading and interpreting the evidence
4. Explaining the findings

The process was iterative and applied the concept of hermeneutic cycle to establish a deeper understanding of the maternal healthcare issues. The researchers also reflected on the process [12].

4.2. Sampling of corpus

The target sample for the study was media articles on maternal health on the context of Malawi. Due to inaccessible of the archives for the print media for the researchers, the sample was restricted to online publications. The online articles were obtained from searches on the websites of news for Malawi. The terms used in the searches were “maternal health”, “maternal healthcare”, “maternal, newborn and childcare” and “safe motherhood”. The results of the search yielded 89 articles which were published between March 2012 to April, 2013. Table 2 summarises the websites and number of articles analysed for the study.

Table 2. Summary of sources of the articles

Online news	Website	Number of articles
Nyasatimes	www.nyasatimes.com	33
Nation online	www.mwnation.mw	19
Daily times	www.bnltimes.com	25
Malawi voice	www.malawivoice.com	12
Total		**89**

5. Summary of results

The results for data are presented as follows: The first subsection presents the validity claims on truth followed by a summary of sincerity claims. The third sub-section highlight validity claims on legitimacy. The forth sub-section summarises comprehensibility claims.

5.1. Validity claims on truth

The aims and objectives for maternal health in Malawi are explicitly reported in the selected online news articles. The aims are presented as part of the Safe motherhood initiative which the President launched in May, 2012. One of the aims of

the initiative is to reduce maternal mortality rate. The claims were clear and phrased to indicate the objective of the safe motherhood as noted in the following statement by a donor:

> "*Malawi has a one of the highest maternal mortality rates in the world – standing at 675 deaths per 100, 000 births whereas the birth rate stands at almost six children per mother. This shows that a decline from 1120 maternal deaths per 100, 000 and a birth rate of seven*" [NO-4:2].

This statement may mean that success for reduction of maternal mortality rate was presented in terms of numbers of deaths per 100, 000 births which may be used as a benchmark to evaluate the performance of the interventions. If the new maternal mortality rate will be more than the current mortality rate, the maternal health interventions will be considered to be unsuccessful. If the new maternal mortality rate evidence will be below the current maternal mortality rate, the maternal health interventions will be considered successful.

The analysis also showed that there was emphasis on the benefits for promoting maternal health. Some of the benefits were reduction in maternal deaths and well-being of mothers and newborn children. However, there was limited evidence to support some of the claims on the benefits of maternal health. Table 3 summarises the claims of the perceived benefits for maternal health.

Table 3. Examples of statements on benefits of maternal health

Statement	Evidence	Comments
"… with these Safe motherhood committees, there has not been a single death in the area over three years …" [NO-1:1]	None	A community leader commenting on the reduction of mortality deaths
"Maternal health and Safe motherhood will not be politicised but that it will continue diligently serve its purpose which is saving mothers from dying while giving birth" [NO-2:2]	None	Political leader assuring the electorate on the aim of the maternal health initiative
"to reduce early and unwanted pregnancies and women that result in their poor health as well as deaths" [NO-5:1]	None	Local leader commenting on the need to support maternal health
"… bringing back the joy and dignity that our mothers and the newly-born deserve at this critical stage of life …" [NO-7:2]	None	Private sector organisation supporting maternal health interventions
"… our commitment to partner government and relevant stakeholders in fast-tracking the progress towards MDGs four and five" [NO-7:2]	None	Private sector organisation in supporting development

As highlighted in Table 3, the articles mainly highlighted the benefits for reducing maternal mortality rate but there were no indications on how to implement the initiatives reference was only made to challenges but not how the other social factors could be dealt with to realise the benefits of maternal health.

5.2. Validity claims on sincerity

Sincerity claims were analysed focusing on how metaphors were used in the discourse on maternal health. Metaphors may be used to clarify issues to the reader of audience. Three metaphors emerged from the corpus related to maternal health in

Malawi and these were “secret mothers”, “angel and devil” and “waiting homes”. Table 4 summarises the description of the metaphors and the frequency of use in the corpus.

Table 4. Examples of metaphors on maternal health

Metaphor	Statement / description	Frequency of use
Secret mother	*“usually elderly women, who serve as liaisons between an expectant women and the professional health workforce from the time of conception until 42 days after delivery”* [NO-1:1]	2
Angel and devil	*“… while the government is encouraging mothers to deliver at health facilities to reduce maternal and new born deaths, it is discouraging to note that same health workers who are supposed to advance government agenda, they are sabotage it. The same nurse or clinician is an angel in a private clinic and becomes the devil in a public facility. Life is more than money … ”* [NO-3:3]	1
Waiting homes	*“… there is now an expectation that women who go to the clinic get quality support. As part of the presidential initiative [Maternal health and Safe motherhood] there is the provision of what we are calling ‘waiting homes’ because ‘shelter’ is not an appropriate word. We will be very keen to promote more waiting homes …”* [NO-8:3]	3

Secret mothers were perceived to be a solution for addressing the issue of non-qualified persons who were providing maternal health to women such as traditional healers and TBAs. Whilst such terms are used to promote the maternal services for qualified persons for maternal health, TBAs may feel excluded in their communities and that their knowledge is not relevant to the needs of modern communities.

Pertaining to angels and devils, it was reported that some of the medical personnel did not abide to the code of ethics for their profession. The nurses were not treating well the women in public hospitals but performed well when working in private hospitals. The reports on these incidents may be highlighting some of the challenges in the public health sector related to remuneration which was leading to work workers and nurses to work in more than one health facility.

Waiting homes metaphor was related to inadequacy of facilities in health centers. It was reported that international donors were investing in infrastructure to ensure that there was high quality services in the health centers. The investment in health facilities was perceived as a means for ensuring quality of services in the health centers which will encourage women to deliver at health centers.

5.3. Legitimacy validity claims

One way of analysis legitimacy is assessing participation to a discourse and establishes whose voice is heard and who is not heard. The corpus was analysed to establish participants to the maternal health discourse. The stakeholders who participated in the discourse were traditional leaders, health workers, the state president of Malawi, the police, researchers, NGOs, international donors, beneficiaries, musicians, private sector organisations and journalist. Table 5 outlines the participants

to the discourse on maternal health in Malawi and their concerns and interests reported in in the online news articles.

Table 5. Stakeholders participating in maternal health discourse

Stakeholder(s)	Concerns or interests reported in the media	Reference
Traditional leaders	Leading communities in participating in maternal health	NO-1, NO-5, NO-6
Health workers	Ensuring that health professionals follow ethics of their practice	NO-3, DT-9, MV-17
Government officials	Commitment and supporting maternal health	MV-17, MV-13
Political leaders / The state president	Supporting maternal health initiative such as maternal health and safe motherhood	NO-2
The police	Resolving disputes between health professionals and maternal health beneficiaries	NO-2
Researchers	Providing information on maternal health issues	NO-3
NGOs	Supporting maternal health initiatives	DT-20, MV-15
International donors	Financing and supporting maternal health initiatives	NO-8
Maternal health beneficiaries	Concerned with quality of services delivery in the health centers and their well-being	NO-2
Private sector organisations	Supporting infrastructure investment in maternal health initiatives	DT-20, NO-7
Journalists	Reporting on policy issues related to maternal health	MV-12, MV-14

As demonstrated in Table 5, the stakeholders who did not participate in the discourse on maternal health were TBAs, pharmaceutical companies, health insurance companies and men who would also contribute towards the success maternal health. Community members such as men who are also indirectly affected by maternal health did not participate in the discourse. This may mean that these stakeholders were being excluded in expressing their views, opinions, perceptions and experiences on maternal health which could support attainment of the aims and goals of maternal health.

5.4. Comprehensibility claims

The analysis for comprehensibility focused on the intelligible of messages and completeness of the communication. The corpus was mainly from the online news articles and conformed to the language and syntax as it would be expected for any general press. The online news articles were expected to be read by diverse audience. The articles contained terms that were related to maternal health and on overall the communication was complete and intelligible to the targeted audience.

6. Discussion and conclusion

Malawi is one of the countries with low internet access due to challenges for high cost of internet services, lack of access to electricity especially in rural areas and low literacy levels [32]. Despite these challenges part of the population access internet at work and in public access facilities such as telecenters, internet cafes and libraries [33, 34]. There is a possibility that some of those who use internet access online news articles on health issues and influence their opinions and decisions on maternal health

The findings in the study have showed that to some extended online media is securing social inclusion of maternal health through reporting on issues for maternal health for stakeholders such as politicians, researchers, law enforcing agents, health workers, local community leaders, international development agents, private sector organisations, journalists and the beneficiaries. Nonetheless, the analysis showed that there was no evidence on reports for the TBAs who form part of the maternal health care providers and are vital in areas where health facilities are not accessible or at a long distance [35].

It is estimated that TBAs deliver about 25% of pregnancies [8]. Despite their contribution the government of Malawi has burned some of TBAs to be part of the maternal health care providers to reduce maternal mortality rate [36, 37]. This has led to the exclusion of some TBAs in maternal health although they may offer other services such as indigenous cultures, promoting health beliefs and practices among maternal health beneficiaries [38, 39]. These services may be included in maternal health. Online media may be used to support awareness of the some of the appropriate roles of TBAs may be supporting modern health services and promoting their inclusion in maternal health in addressing some of the challenges for maternal health such as inadequate personnel. Acquiring skills through training in safe methods for maternal health is vital component for the inclusion of TBAs [37, 40].

Other stakeholders that were excluded from the maternal health discourse were pharmaceutical companies and health insurance companies. This may be attributed to the fact that there are few pharmaceutical companies in Malawi and most of the drugs are sourced from outside the country. The government is the main provider for health services and most of the public and mission hospitals provide free health services [41, 42, 43]. This may have led to limited focus of the roles the pharmaceutical companies and health insurance companies; hence no articles were published related to these stakeholders.

From the discussion the study makes the following recommendations for policy makers and media to support inclusion in maternal health [44]:

- Promoting awareness of the maternal health issues to those indirectly affected by maternal health in communities such as men
- Media institutions to report on issues for those excluded in maternal health and to bring to light issues for maternal health the policy makers and the general public. Online newspapers may be ideal for reaching a wider audience who have internet access.

The study offers useful insights on social inclusion on maternal health discourse especially for developing countries. The insights may be useful to policy makers in other developing countries to be aware of the social inclusion issues in maternal health as the 2015 dateline for MDGs is approaching. The study recognised the limitations where there were few issues reported on the beneficiaries for maternal health. The online news articles mainly reported on the supply side of maternal health. A further study is recommended on the effectiveness of online media focusing the demand side of maternal health.

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