Engaging Social Media for Health Communication in Africa: Approaches, Results and Lessons

Adebayo Fayoyin*
UNFPA, Johannesburg

Abstract
Advancements in digital media and communications technology have generated considerable optimism on the role of social media in achieving developmental and public health outcomes globally. The unprecedented availability of digital devices and platforms has also promoted different development institutions to design and implement a range of social media interventions for social and behaviour change. This paper examines how social media are transforming health communication in Africa. Our study demonstrates the existence of an avalanche of interventions using different mobile devices and mobilization approaches in addressing multiple health issues. The interventions target different population groups and are not limited to young people who are considered as the major users and consumers of social media content. However, the study cautions against “new media utopianism” or “social media-centricism” because technology is a tool of development not an end in itself. It recommends strategies for effective deployment of social media in health communication including applying a theory of change model, creative integration of multimedia platforms and meaningful participation of all actors to generate a new development narrative. Implications for health communication’s theory, practice, policy, research and training are also addressed.

Keywords: Digital media; E-Health; Social change; Health communication

Introduction
Africa’s health burden is still currently high, requiring (among other strategies) the application of innovative communication approaches in achieving the continent’s public health agenda. The outbreak of Ebola in 2014, which killed over 11,000 people in at least five countries [1] is a sad reminder of the continent’s unending susceptibility to epidemics. HIV is still ravaging different communities and population groups, despite the deployment of multiple advocacy tactics by the AIDS fraternity in the last 30 years [2,3]. In addition, over 50 per cent of women who die from pregnancy-related causes, and at least 30 percent of under-five deaths among new-borns, occur on the continent [4]. Although Africa has only 13 per cent of the World population, it carries 24 per cent of the global health burden [5].

Communication is central to public health delivery, and advances in digital media and communication technology hold significant prospects for addressing major public health and development issues confronting the continent. Such optimism is grounded in the increasing levels of internet penetration as well as intrinsic characteristics of social media which include interactivity, genuine dialogue, speed, multimodality, user-generated content, mass customisation, horizontal communication, and multi-directionality of information [6,7]. Other studies have also underscored the significance of information and communications technologies in transforming health communication practices [6,8,9].

Therefore, this paper examines the utilisation of social media for health communication in Africa. It builds on previous studies [7,10,11] on the use of social media for health communication at the global level. The paper outlines the promise of social media in health communication and the major limitations of their application followed by five illustrative case studies on the deployment of social media for specific health issues. The cases are not intended as a comprehensive evaluation of the interventions, rather as an attempt to expound the emerging patterns.

From the analysis, the paper recommends that health related social media interventions should be grounded in a theory of change, enhance meaningful participation of critical actors in the development process, and address the problem of inequities. In addition, health communication programmers need to ensure the strategic harmonisation of social media interventions in line with specific national health agenda and programmes for synergistic implementation, and not as fragmentary and uncoordinated branded interventions of individual aid agencies. Finally, increased attention is needed for the sustainability of the flurry of social media interventions to avoid a situation where the development landscape in Africa is dotted with unsustainable ‘white elephant’ E-Health communication projects.

The Global Context: The Shift Toward E-Health Communication

There is currently a global recognition of the power of digital media in transforming various sectors of society, especially public health delivery. Advances in digital technology have resulted in the application of new media technologies for diverse health problems [12-15]. However, this paper focusses on the use of digital media for health communication purposes, which is sometimes referred to as E-Health communication.

As argued in [12], the use of electronic communication for health purposes predates current advances in digital media. Early efforts to use information technology for health delivery involved didactic patient...
communication through websites, telemedicine, and participant-centre approaches such as blogs, wikies, mobile phones, emails and podcasts. Technologically-enabled solutions were also intended to provide alternative sources of information in the health sector, including sharing of data and creating opportunities for interaction among media personnel. Nevertheless, developments in internet technology and an unprecedented growth in mobile infrastructure have expanded the deployment of social media devices for health communication and education globally.

Social media platforms have now become indispensable for health literacy and an overall improvement of health outcomes [9]. Furthermore, some forms of E-Health interventions [16] include data collection and disease surveillance, health information management and point of care, treatment compliance and emergency response. Other areas of application include health information dissemination, health care monitoring, training of health care workers, tracking of disease outbreak and diagnostic support [7,11].

In their study, [17] state that mobile telephony can reach more people with health information, facilitate interactivity, and promote confidentiality of use. Such transformative effect of mobile technology in health care in developing countries is affirmed by [18] as follows:

Mobile health is often described as a ‘game-changing’ technological platform. Unlike other mass communication platforms such as television and radio, mobiles cannot only be used to provide information and enable people to interact with that information, but also to deliver services and strengthen health systems. In other words, “mobile telephony can unite both the educational and clinical functions of mHealth in one device” [p.7].

Specifically on the role of digital technology for social marketing, [19] suggests that advancement in information technology offers major opportunities for health promotion in engaging health professionals with their patients, and the mobilization of new clients. The author hypothesises that the new media signals a shift in thinking about traditional methods of social marketing and communication for development. This assertion is consistent with [20] who contend that more than any other time in history, social media offers timely and credible health information, critical for improving public health outcomes quickly and directly.

Against the backdrop of the defining impact of computer and internet technologies [6] affirms that using social media for health communication will eliminate some of the inherent limitations of traditional health communication through improved customisation, contexuality, interactivity and mixed media utilisation. One could also argue that digitally enabled social media interventions such as mobile phones, instant messaging, chat room forums and social networking sites are also particularly relevant for communication of sexual and reproductive health outcomes.

Nevertheless, the use of social media for health communication is not without major challenges. From a broader perspective, it is argued that social media could potentially reinforce uneven disparities in society. It has also been suggested that due to the traditional North-South digital divide, which indeed is a social, economic and cultural divide, ICT innovations may not considerably ameliorate the situation of the rural poor [21]. While some may argue that the discourse about the digital divide belongs to the moribund era of the New World Information and Communication Order (NWICO) in the 1980s, current evidence suggests that asymmetry in media access and reach exists in society today [22]. Specifically on economic impact, [23] demonstrates that mobile phones can result in ‘informationalization of poverty’ through the ‘creation or recreation of economic disambiguation’. As an illustration, [24] mentions how users of new media in Ghana sometimes divert money meant for important family needs and welfare into buying airtime and expensive phones.

Researchers have also expressed serious concern over the use of mobile phones for health delivery, especially because of its embryonic infrastructural support. As a result, [18] posit that mobile telephony should not be considered a panacea for the health challenges of developing countries. Another study lists the following constraints on the use of mobile phones for health communication: cost, limited access to mobile phones, content restriction and limited personalisation of health information [17].

Furthermore, the digital context has substantial potential for health misinformation. Despite wide usage of the Internet for health information, [25] opines that it is also a source of massive misinformation. The conclusion is validated by [26] who have established specific instances of misinformation and circulation of incorrect health data nationally and internationally because of information agility and social connectivity of the digital age. This concern is further reinforced by [27] with respect to the impact of social media on young people. They submit that the Internet and social media can perpetuate misconceptions on sexual and reproductive matters for young people and can lure them into inappropriate platforms and content.

From the foregoing, it is argued that social and digital technology has great potential for transforming health education and communication globally. However, significant caution is necessary on its perceived impact within the pathway of social and behaviour change. Thus continuous lesson learning will be necessary on how to maximise the power of social media for public health communication [28].

Case Studies

The African continent has, in recent years, experienced significant progress and transformation in its digital technology systems. For instance, internet penetration in Africa has been described as ‘phenomenal’ and the emergence of mobile technology is generally perceived as the ‘second communications revolution’. Specifically, [29] observes that “mobile phones made it possible for millions of Africans to make their first telephone calls ever”. Digital solutions have been deployed for different sectors of society, including health education and communication. A host of country-specific and multi-country social media initiatives have been designed for addressing the multifaceted public health dilemmas confronting the continent [17,30,31]. To this end, an assessment by the World Health Organisation in 2012 concluded that besides scores of existing interventions, over 300 E-Health initiatives were being planned on the continent. And judging by the rapidity with which development agencies have been applying E-Health and social media technologies, the number of such interventions would have grown exponentially. In the following section, a brief description of five major digital health communication interventions is provided. Following the review, cross cutting issues and implications are discussed.

Social Media for Health Education on Ebola Outbreak in Nigeria

Nigeria was one of the West African countries affected by the Ebola outbreak in 2014. The discovery caused a global scare due to the
the group is 17.5 per cent while the overall national adult prevalence is
insightful understanding of the impact of social media on the Ebola
why did it not perform the same magic in other countries? Answers
like HIV or malaria or changed the behaviour on condom use in many
been singled out as instrumental to the containment of the outbreak.
providing the public with the much-needed information on screening,
Cross (IFRC) sent two million text messages each month about Ebola,
signs and symptoms of Ebola. The International Federation of the Red
real time information on the causes of Ebola, its spread, diagnosis and
by InStrat to health care workers across Nigeria [33]. This provided
the issue and communicate such to the public. An Ebola tutorial was
Facebook, Twitter and Google Trends to identify topics of interest on
on the virus, using their multiple platforms to educate their networks
health communication was fundamental to the results attained. In
space, even in designing and implementing social media interventions
the country.
From this case, it is argued the integration of the virtual and physical
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health communication was fundamental to the results attained. In
this case as well, it would be difficult to arrogate any ‘uber effect’ solely
to social media.

Mobile Phones for Polio Campaign in Somalia

Somalia, in the Horn of Africa, is one of the countries in the polio
epidemic belt. The country was certified polio free in 2006, but new
cases of wild polio virus were detected in 2013, necessitating an intense
social mobilisation campaign for its eradication [39]. Since the new
outbreak, targeted immunization of the population and house-to-
house outreaches were implemented. Development partners in Somalia
(Oxfam, UNICEF and Hijra, a local NGO) decided to experiment with the
use of mobile phone technology for polio health promotion for two
main reasons. First, the political situation has continued to make most
of the population hard-to-reach due to insecurity. Nonetheless, the
country is experiencing an increasing penetration of mobile phones,
making targeted information sharing much easier. As a result, the
agencies designed a new mobilisation strategy with mobile phone
technology as the major tool of communication on polio immunization.

The initiative involved the use of pre-emptive community education
-only 1.3 per cent. Infection rates among this group are even higher in
some districts, especially in Accra with 34.4 per cent. However, in view
of the deep-rooted stigma associated with this sexual orientation in
Ghana (as in many African countries), members of the group operate
underground and are unable to access HIV services. It is also widely
recognised that MSM in the country lack access to basic information
about HIV transmission, including infection and prevention [30,34].
The traditional modes of information, education and communication,
including targeted face-to-face outreaches are generally less effective
as tools of engagement due to entrenched stigma and discrimination.
However, studies in other parts of the world have established the
relevance of social media for mobilizing and engaging with similar
groups [35-37]. The studies concluded that social networking
communities are more effective in targeted mobilisation of vulnerable
populations and those perceived as high risk groups.

Against this backdrop, FHI360 initiated a social media campaign
with MSM in 2013. The programme was aimed at building a relationship
with them and sharing information via existing social media platforms,
such as Facebook, Badoo and Grindr. Both official and closed Facebook
pages were deployed in reaching and opening a conversation with the
members. One-on-one interaction through identified social media
platforms was integrated into the package of communication [38]. The
expected outcome of the campaign was information sharing for group
engagement, but also to promote conversation on specific issues and
for increased uptake of necessary services [30].

As findings from the programme demonstrated, 15,440 unique
MSM were mobilised and many of them became more predisposed to
seeking customised services [30]. However, traditional modes of
engagement with MSM leaders – beyond social media platforms –
were integral to the intervention. Initial and ongoing face-to-face
consultations were established with key influencers of the group. Thus
even with the use of social media as the dominant tool, interpersonal
communication was found to be appropriate for group mobilisation.
According to [30] traditional outreaches also reached 12,804 MSM,
which allowed the programme to cover over 90 per cent of MSM in the
country.

From this case, it is argued the integration of the virtual and physical
space, even in designing and implementing social media interventions
for health communication was fundamental to the results attained.
In this case as well, it would be difficult to arrogate any ‘uber effect’ solely
to social media.

Social Media for Group Communication on HIV with
Men Who Have Sex with Men (MSM) in Ghana

According to Ghana’s HIV epidemiological profile, men who
have sex with men (MSM) constitute a major group to be addressed
in tackling the HIV pandemic in the country. HIV prevalence among
the group is 17.5 per cent while the overall national adult prevalence is

populous nature of the country and the catastrophic consequences of
a full blown epidemic for the global community [1]. Based on lessons
from other countries in the region, effectively handling the crisis
required massive education of both health workers and the public. With
immense global support, the country instituted a coordinated response
which curtailed the outbreak. In the end, only 20 people died compared
to nearly 8,000 and 7,700 in Sierra Leone and Liberia respectively.

Many commentators have attributed the success of the response
primarily to the impact of digital media. At the time, Nigeria had over
130 million mobile phone users and 67 million internet subscribers;
and active social networks which played a significant role. In an article
published in the high profile British Medical Journal, titled “How
Twitter may have helped Nigeria contain Ebola”, it is argued that targeted
social media campaigns in Nigeria helped to disseminate accurate
information about the disease and to correct hoax messaging [32].
Several Twitter handles were established, sharing regular information.
UNICEF organised a campaign on Facebook which disseminated
timely information and also deployed an army of U-reporters (a
group of young people involved in an innovative youth participation
programme) for information monitoring, reporting and sharing
information with relatives and friends. To assist in making messages
on the virus go ‘viral’, the World Health Organisation (WHO) and the
Centre for Diseases Control (CDC) provided appropriate information
on the situation nationally and internationally. Influential national
bloggers and celebrities joined in the campaign for information blast
on the virus, using their multiple platforms to educate their networks
and constituencies.

Health workers also used a combination of Android Apps,
Facebook, Twitter and Google Trends to identify topics of interest on
the issue and communicate such to the public. An Ebola tutorial was
developed by Vecna Technologies and Anadach Group and distributed
by InStrat to health care workers across Nigeria [33]. This provided
real time information on the causes of Ebola, its spread, diagnosis and
treatment [17]. Another device used for the response was Ebola Alert,
a technology-based organisation of volunteer doctors established to
provide information on specific aspects of the outbreak and virus 24/7.
Countless SMS platforms were used to circulate information on the
signs and symptoms of Ebola. The International Federation of the Red
Cross (IFRC) sent two million text messages each month about Ebola,
providing the public with the much-needed information on screening,
diagnosis and treatment [17]. Overall, the deployment of social
media for accelerated and extensive information dissemination has
been singled out as instrumental to the containment of the outbreak.
However, critical questions need to be answered: How do we attribute
specific success to social media in the process? Why has ‘information
blast’ not created similar breakthroughs for other health pandemics
like HIV or malaria or changed the behaviour on condom use in many
countries? And if social media was pivotal to the success in Nigeria,
why did it not perform the same magic in other countries? Answers
to these questions (and many other related ones) will provide more
insightful understanding of the impact of social media on the Ebola
outbreak in Nigeria.

Social Media for Group Communication on HIV with
Men Who Have Sex with Men (MSM) in Ghana

According to Ghana’s HIV epidemiological profile, men who
have sex with men (MSM) constitute a major group to be addressed
in tackling the HIV pandemic in the country. HIV prevalence among
the group is 17.5 per cent while the overall national adult prevalence is
through mobile phones. The education component comprises four interactive daily SMS sessions intended to reach 100,000 people in 17 districts. It also includes distribution of non-food items as an incentive scheme for promoting adherence to immunization schedule through an mVoucher mobile system [31].

An evaluation of the project concluded that the polio education component reached 104,358 people, much higher than the expected target. However, due to logistical challenges, the mVouchers system achieved only 50 per cent of its target. The evaluation suggests that the project has the possibility of being a game changer for polio education and conditional distribution of incentive scheme [31]. But it also argues that ‘novelty factor’ might have been responsible for high service uptake. As a result of the numerous intervening variables in the programme design and implementation, it is difficult to attribute the high uptake of polio immunisation directly to the mobile information dissemination. To be clear, the incentive scheme of non-food items and the novelty of digital media might have played a critical role in the programmes results. This again demonstrates the need for a robust investigation of the impact of the various variables in programme delivery in order to isolate cross cutting, compounding or mutually reinforcing variables in health communication.

Mobile Phones for Maternal Health Education in South Africa

The problem of maternal health in South Africa has attracted substantial public and media interest. 4,300 mothers die every year in the country due to complications during pregnancy and childbirth. In addition, 20,000 still births are recorded annually while 23,000 die in the first month of life. Many of these deaths are preventable with effective health education and timely interventions.

In 2013, health and development partners established MAMA South Africa (a package of E-Health communication) to provide health awareness and information. This intervention disseminates culturally sensitive information to expectant mothers through mobile phones, via an SMS messaging service in five different languages and a social networking platform called MXit; a popular social media site in the country. Four channels of mobile communication – interactive website, text messaging, social networking, and voicemails are offered to clients [40].

The intervention includes a platform, Mom Connect, designed to link pregnant women and mothers to health care workers through mobile technology as well as an interactive question and answer portal. Critical health messages on pregnancy and child birth issues are sent on mobile phones to pregnant women and mothers registered in the scheme. For pregnant women, it incorporates stage-based health information on their pregnancy, and for mothers living with HIV it sends essential messages on their treatment updates [41,42].

The intervention also updates client medical records in real time for health workers to have adequate information on which services to provide. The personalised information dissemination programme has been recognised as an innovative approach to client communication. Timely health messages made available across handsets and mobile carriers also bridges the information gap in ante-natal and maternal care.

An assessment showed that over a million women have been reached through various messaging services [42]. Anecdotal feedback suggests that the mobile health information programme is relevant and appropriate in maternal care and has contributed to improving mothers’ knowledge on maternal and child health [41,42]. The messaging service developed under the MAMA programme has also been integrated into the national health messaging architecture on maternal and child health. Such integration (one of the few identified in our study) enhances the sustainability of the intervention.

Multi-country Social Media Programme for Youth on Sexual and Reproductive Health (SRH)

Demographically, young people constitute the highest population group in Africa, but they are faced with widespread needs for information, skills and services for their sexual and reproductive health. A global report [4] argues that sub-Saharan Africa’s adolescent birth rates remain the worlds highest, with a regional average of 120 compared to the developing world average of 85. Less than 15 per cent of women aged 15-19 report current condom use, and less than 5 per cent report condom use in most countries in sub-Saharan Africa. Girls report a less than 10 per cent use of a modern contraceptive method. These and other SRH issues require significant youth mobilisation through diverse platforms such as social media [43].

In the last ten years, Marie Stopes, a US-based institution, has been promoting sexuality education through SMS for youth across the continent. According to Williamson [44], the models include one-to-many SMS, one-to-one SMS, and an automated two-way information quiz. Sims service locator and mobile phone voucher programme form a part of the communication’s package. An assessment of the intervention suggests mixed results. While it provided information at scale, it observed that knowledge and information sharing did not necessarily translate into behaviour change. The study concluded that health communication should not be considered as a “silver bullet” for all the barriers to SRH programming targeting young people [44].

In Kenya, a similar mobile-based messaging campaign, Mobile for Reproductive Health (m4RH), which integrates “Text for Change”, has been running in the country for nearly a decade. Preliminary evaluation indicates that it is a vibrant and powerful platform for mobilizing, engaging with, educating and empowering young people on SRH and HIV [45]. In 2015, another SMS infoline was established by the Family Planning Options (FHO) to increase sexual and reproductive health information and knowledge among young people [46]. These are two of the numerous E-Health communication solutions for sexuality education and HIV prevention in the country, which have now been extended to other countries in East Africa. Their focus is on messaging and information dissemination on SRH among youth. Ultimately, messaging is expected to lead to discussion of sensitive issues, and finally behaviour change. However, the extent to which this assumption is validated through impact assessment is yet to be convincingly established.

Critical Issues and Discussion

From our conceptual premise as well as findings from the foregoing case studies, several critical issues that pertain to the deployment of social media for health communication can be identified. In this section, five main themes with implications for the study and practice of communication are examined.

An Avalanche of Social Media Interventions

It is evident that the increasing levels of internet penetration and the pervasiveness of mobile devices and social networking services have led to the burgeoning of E-Health communication in Africa. These include a wide range of platforms, comprising (i) networking
sites such as Facebook, YouTube and LinkedIn, etc.; (ii) micro blogging platforms such as Twitter, Wikiks, and (iii) mobile messaging services such Instant Messaging, SMS/MMS. Some of the interventions utilise single media platforms such as Twitter or Facebook, while others adopt multi-media platforms. However, it is argued that integration of social media into existing traditional multi-media communication initiatives is taking place, contrary to earlier findings by [10] which did not observe this trend.

The demographic focus of interventions also varies with the problem being addressed. Although many of them target young people, who are generally perceived as the major users and consumers of digital content, many interventions target other population groups too. Based on the current trend there will be an increase deployment of social media for health outcomes. However, it would be necessary to consider their effectiveness and sustainability. Practical field experience seems to indicate that the deployment of social media for public health delivery is being viewed as another ‘pet project syndrome’ of development agencies for their branding and visibility. Many of the interventions are branded for specific agencies with limited linkages and coordination. It is thus critical for development institutions to ensure greater coordination of social media programmes to enhance their effectiveness. Strategic alignment of social media interventions will be more impactful rather than the current fragmentary efforts supported by different development agencies. This will ultimately reduce transaction cost and achieve more mileage.

A Flood of Messages

The overall goal of health communication is multifaceted: addressing the information gap on specific issues, changing social norms and promoting a positive attitude among the target audience. However, the use of social media seems to be more for ‘information blast’, ‘message storm’ or ‘buzz creation’ or ‘noise’ around specific health issues. Most of the projects attempt to deliver messages, while some focus on group conversation. How such conversation is converted desired behaviour and social change is unclear. Conceptually, social media devices and platforms are largely used for sharing, networking, and connectedness [47]. It is thus essential to underscore the need for a stronger conceptual underpinning of E-Health communication interventions in relation to the pathway to social and behaviour change for different demographics and audience segmentation. While social media platforms are appropriate for message internationality in health education, they may not be particularly effective in addressing underlying structural issues and deep-seated cultural practices. Also, social and behaviour change is a complex process and merely reaching specific individuals with information will not result in behaviour change. To this end, it is critical to consistently apply a theory of change construct to each social media intervention in order to determine their level of social and behavioural outcomes.

Focus on Digital Innovation

From this study, it is apparent that development agencies have become so enamoured with social media interventions. As demonstrated, the range of application includes mobile phone technology, Thunderclap social media tools and web-based applications for information sharing, connectivity and even for training. Yet, it is apposite to reaffirm the established notion that technology is merely a tool of development and health communication [21,48]. Having the gadget is not the same as using it for health outcomes or for predetermined behaviour by health communicators.

Inequity Amidst Social Media Ubiquity

Despite the avouched ubiquity of social media, inequities exist on several fronts. Although the reach of digital interventions is significantly higher than the traditional Information Education Communication (IEC) process of engagement, it still has limited coverage and access. Equity issues are not limited to access but to utilisation. A study on young people in Kenya reveals disparities in access and utilisation of social media by young people, consistent with earlier studies [49]. In addition, [50] highlights the issue of exclusion and inequalities in digital communication while [51,52] underscore the need to redress the digital divide that characterises access to and utilisation of digital technology. Thus, for effective utilisation of social media for health communication, an equity-focussed perspective will be critical.

Experts-Driven Interventions

The role of meaningful participation of critical actors and target audience has been unequivocally raised in development discourse [53,54]. But the extent to which their voice is framing social media interventions is uncertain. Thus, for effective social media programming to achieve public health outcomes, a stronger emphasis on the voice of the beneficiaries would be central [55,56]. A shift from needs assessment to rights analysis, coupled with an adjustment from ‘information transmission’ to ‘participatory learning mode’, will be desirable. This also assists in eventually changing the narrative of development discourse, which is still currently monopolised by experts.

Enhanced Partnerships

E-Health communication interventions have clearly demonstrated the power of creative collaboration among different stakeholders such as government institutions, development agencies and the private sector. Many digital service providers in the E-Health communications sphere are mobile phone companies investing in products and solutions to avail the population with health services and health education platforms. Such collaboration has been recognised as indispensable to achieving development outcomes [57]. However, additional strategic thinking around sustainable relationships for public good will enhance the role of the private sector in health communication and overall international development. Also, widening the focus of partnership beyond corporate institutions to networks and communities helps in community E-Health communication approaches.

Conclusion

Advancements in digital media have led to significant enthusiasm on the use of digital technology for health and development communication. Multiple interventions have been instituted using different social media tools, platforms and devices for health promotion. However, in view of the functional and dysfunctional potentials of social media in society, a pragmatic perspective of their role is necessary.

First, this requires questioning their underlying assumptions and avoiding the tendency toward ‘magical effects’ syndrome that currently characterises the deployment of social media for public health. While it is important to celebrate the potential and impact of social media in health communication, arrogating “unlimited - uber-effect” to them takes the discourse on media effects back to the era of hypodermic needle model, which is out of tune with reality.

Second, technology is a tool of development not an end in itself. Thus, we need to be mindful of a drift toward “new media utopianism”
or “social media-centricism”. As [58] rightfully suggest, it is important to bridge the potential of E-Health communication with its reality in view of challenges associated with limited access, linguistic, cultural and literacy barriers. Therefore, a more pragmatic perspective of the promise and performance of social media technology in health and development programming and a full appreciation of their limitations in health communication are called for.

Third, the author argues for a holistic approach to social media programming in health communication with the leadership of national partners. As currently structured, many of the interventions reflect the interests of various agencies and end up as pilot projects and hobby ideas of such institutions.

Implications for the Study and Practice of Communication

In view of the relative novelty of the devices, the speed and scale of new social media interventions will likely increase. As a result, communication education in a social media age needs to consider their implications for communications theory, practice, policy, research and training.

i. Theory: Of particular importance is the need to generate and widen theoretical insights on how social media respond to the pathway of change in a social and behavioural context. Media use in health communication is intended to contribute to specific or overall areas of change, such as risk perception, vulnerabilities, individual agency and levels of influence in social change. Thus far, substantial theorising is lacking or weak in the literature. Hence, developing appropriate theories of change for effective grounding of social media interventions is of utmost urgency in maximising the power of social media in health communication.

ii. Practice: A more robust interdisciplinary framework in designing and implementing social media programmes for public health delivery is called for. Health promotion has always required insights from different intellectual domains, but in the digital age, heightened engagement of various professionals is all the more crucial for effective delivery of social media interventions. A wider space for critical users of social media needs to be created for effective design and execution of such programmes. This will also eventually influence the current development discourse, which is still largely driven by experts.

iii. Policy: Systemic policy and programme framework for effective mobilisation of the power of social media for wider development outcomes is paramount. Although many African countries have put in place policies to harness ICT for the continent, they need to respond to the social and behavioural dimensions of the overall health and development context. More investment is needed in E-health communication policy design and implementation from our communications institutions.

iv. Research: Additional research, meta-analyses and analytical studies with strong evaluative and comparative perspectives are necessary to generate evidence for effective programming in this area. After several years of pilot studies, more cutting-edge perspectives and evidence to advance current thinking have become increasing fundamental. The research agenda should include impact and outcomes of interventions and greater hybridization of platforms. More amenable and accessible monitoring and evaluation skills and insights are required for effective e-health communication programming.

Training: Communication institutions need to continuously reinvent their curricular and teaching methodologies to be ahead of the current international development and public health discourse. Courses that integrate informatics, data sciences, epidemiology, social marketing, philosophy, communications and human rights might need to be considered to provide the development industry with inerrant combinations of insights, perspectives and skills. Non-traditional frameworks that connect even disparate domains of knowledge will be necessary in formulating social media programmes for scale and agility in a highly contested and rights-oriented digital world. In essence, a more nimble approach to the study and practice of communication is desperately needed in an ever changing digital world.

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