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The challenges of qualitative research: Can it be used to strengthen decision making for health care in Uganda?

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The growing need to integrate qualitative research findings in health care is a result of its ability to provide more credence to empirical data from the Uganda Health Management Information System (HMIS) in Uganda. This paper based on literature review identifies some of the main challenges encountered in use of qualitative research findings to inform the policy decision making process. While opportunities abound to generate qualitative information for policy development, the weak research agenda which is largely defined by donors and the dominance of positivists in senior management positions in the Uganda health sector play an important role in locating qualitative research in the development agenda. The paper concludes by stressing the need to support qualitative research as the basis for integrating social development constructs beyond what empirical information derived from the routine HMIS.

Key words: Qualitative research, decision making, health care.

INTRODUCTION

The discourse on use of qualitative research findings to inform policy in health care still receives considerable challenges in Uganda given the practice to use empirical research evidence in public health policy. From a philosophical point of view, the arguments on the superiority between quantitative and qualitative paradigms continue to dominate the academia and research fraternity. Existing evidence suggests that different parts of the population respond very differently to identical interventions (Killoran and Kelly, 2004) and an intervention that improves the health of a population may also increase

inequalities in health (White et al., 2009). Thus, focusing on the average effects of interventions using quantitative research findings may miss important differences (Tugwell et al., 2006). Some authors argue that an empirical evidence based approach to public health policy decision making may actually increase health inequalities, as it is likely to reflect the same biases as the production of research evidence (Biller-Andorno et al., 2002). A country such as Uganda where it is usually difficult to obtain high quality data, reliance on only quantitative information alone to guide decisions can

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results into wrong policy outcomes.

The Uganda Health Management Information System (HMIS)

Currently, decision making in health care is heavily reliant on information generated through the health information system (HIS) which was designed in 1985 to capture and analyse morbidity data for selected communicable and non-communicable diseases, and other services like immunization and family planning. Information was collected in the health facilities, summarized at the district level and later forwarded to the MoH at the centre where data analysis would be done. After 7 years of implementation, it was felt that the system was leaving out vital management information, such as staffing levels, infrastructure, health facility management, medical equipment availability, financial information and drug management (Kintu et al., 2005). A review was therefore commissioned in 1992 with the aim of determining possibilities of collecting management information using the same channel. Based on findings and recommendations of this review, pilot-testing in 2 districts was done for one year and nationwide implementation of the HMIS was initiated in 1997 (Makumbi et al., 2010). All other health related information feeds into the national HMIS which is the major source of information on the health care system in Uganda.

Research and monitoring performance of the health sector

Research is a tool that supports evidence-based policy and intervention formulation and is therefore an important component of the Health Sector Strategic Investment Plan III. Under the health sector, the Uganda National Health Research Organisation (UNHRO) is the secretariat for health and related research responsible for coordinating the national health research agenda, whilst research is conducted by several agencies like universities, autonomous institutions and other public institutions with diverse affiliations and districts. While research studies are a source of qualitative and quantitative information, they are not based upon to routinely influence policy decisions compared to the HMIS where information is collected on monthly basis. In reviewing the annual health sector performance report for financial year 2013/2014 (MoH, 2014), monitoring of the core indicators of the Health Sector Strategic Investment Plan (HSSIP) which are linked with the National Development Plan (NDP) is based on the health facility and district reports gathered as part of the HMIS, administrative sources and programme data which is majorly quantitative. The inclusion of qualitative data is

very minimal given that the performance of the health sector is measured through output indicator data. It is against this backdrop that the need to examine the challenges of applying qualitative research information is analyzed in order to provide possible avenue to address the identified barriers for improved policy decision processes in health care.

Background to qualitative research

Qualitative research derives its meaning from the approach that stresses quality and not quantity, that is, social meaning rather than collection of numerate statistical data (Miller and Brewer, 2003). It is concerned with developing explanations in social phenomena and therefore aims to help us understand the world in which we live and why things are the way they are. According to Bryman and Burgess (1993), qualitative research seeks to answer questions like: why people behave the way they do? How opinions and attitudes are formed? How people are influenced by events that occur around them? How and why cultures have evolved and the variations in social groupings? Qualitative research studies can provide details about human behavior, emotion, and personality characteristics that quantitative studies cannot match. Qualitative data includes information about user behaviors, needs, desires, routines, use cases, and a variety of other information that is essential in designing a product that will actually fit into a user's life (Demetrius and Bryan, 2012). Norman and Yvonne (2005) conceptualize qualitative research as a method of inquiry employed in many different academic disciplines, traditionally in the social sciences, but also in market research and further contexts. This definition is further expounded by Miles and Huberman (1984) to encompass investigative methodologies described as ethnographic, naturalistic, anthropological, field, or participant observer research. Atkinson et al. (2001) define qualitative research as a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live. In all definitions of qualitative research reviewed, there is convergence in the understanding that it provides avenues to answer questions related to why and how events unfold or blend. This is especially those which are difficult or impossible to quantify mathematically like belief systems, meanings, attributes and symbols. All scholars notably emphasize the importance of looking at variables in the natural setting in which they are found as the basis for qualitative research.

Philosophical foundations to qualitative research

The philosophical foundation to qualitative research can be related to the notion by Pope et al. (2000) that "a

frequent criticism that qualitative data are necessarily subjective, and that such research is difficult to replicate, and amounts to little more than anecdote, personal impression or conjecture". This assertion can only be true or otherwise to the extent it locates itself in the philosophy of research in relation to the merits or demerits of use of qualitative information to influence decision making in health care. In order to create an even ground for analyzing the earlier statement, it is prudent to first unbundle the paradigm under which qualitative research is housed. According to Denzin and Lincoln (2005), Burrell and Morgan (1979), qualitative paradigm provides a worldview or framework of beliefs, values and methods within which research take place. It is premised upon a philosophy of science which is underpinned by philosophical assumptions that underwrite different approaches to social science. It can therefore be conceptualize in social science in terms of four sets of assumptions related to ontology, epistemology, human nature and methodology.

Ontology in qualitative research pertains to assumptions about the nature of reality. It deals with what human nature is like. Qualitative researchers feel that to varying degrees things are real like race or motivation only to the degree that they are named so. That reality is created with words and symbols and it is not separate from observers. Social scientists for example are faced with a basic question whether the reality to be investigated is external to the individual, imposing itself on individual consciousness from without or the product of individual consciousness. Whether reality is of an objective nature or the product of individual cognition and whether reality is a given out there in the world or the product of one's mind (Vasilachis, 2011). In relation to health care, ontology borders on the internal and external realities of the human beings that interact to constitute good or bad health practices. As such, the replicability and reliability of qualitative research findings is very challenging since the researchers' opinion cannot be divorced from the findings and the circumstances under which the research is conducted can equally not be duplicated. This aspect will be one of the basis for discussion in the application of qualitative research findings in the subsequent sections of the article. Connected with the ontological and epistemological perspectives but conceptually separate from them is a third set of assumptions concerning human nature, and in particular, the relationship between human beings, their environment and the agents which transmit infections in health care. All social science clearly must be predicated upon this type of assumption (Laban, 2011). Since human life is essentially the subject and object of enquiry in health care, identifying perspectives in social science entail a view of human beings responding in a non mechanistic or even deterministic fashion to the situations encountered in their external environment. This view tends to be one in which human beings and their

experiences are regarded as products of the environment; one in which humans are conditioned by their external circumstances. Adoption of good or bad health care practices is dependent on ones past and present experience with the environment which tend to shape ones perception towards health care. This extreme perspective can be contrasted with one which attributes to human beings a much more creative role: with a perspective where freewill occupies the centre of the stage; where man is regarded as the creator of his environment, the controller as opposed to the controlled, the master rather than the marionette. The two extreme views of the relationship between human beings and their environment strongly relate to the epidemiological triad of the disease agent, the host and the environment in analysing concepts of health care.

The three sets of assumptions outlined above have direct implications of a methodological nature in health care research. Each one has important consequences for the way in which one attempts to investigate and obtain knowledge about the social world. Different ontologies, epistemologies and models of human nature are likely to incline researchers towards different methodologies. Accordingly, the possible range of choice is indeed so large that what is regarded as science by the traditional natural scientist covers but a small range of options. Adopting the positivistic worldview where methodologies employed in social science research treat the social world like the natural world as being hard, real and external to the individual leaves out substantive elements which view it as being of a much softer personal and more subjective quality. The later provides deeper understanding on the nature of the person and the environment; and their interaction to shape the human perspectives to health care. If one subscribes to a view of the former kind which treats the social world as if it were a hard, external, objective reality, then the scientific endeavour is likely to focus upon an analysis of relationships and regularities between the various elements which it comprises as related to health care. The concern in qualitative research in health care hinges on identification and definition of the elements of health care under study and with the discovery of ways in which these relationships can be expressed. This is usually at variance with standard methodologies applied in natural science which poses a challenge in use of qualitative research findings by policy makers. The inductive nature of qualitative research gives rise to concerns of the large amount of resources required compared to quantitative approaches proffered by policy makers. As such, the methodological issues of importance are thus the health care concepts themselves, their measurement and the identification of underlying themes which are determined by the rigour applied in qualitative research. In methodological terms, it is an approach which emphasises the relativistic nature of the social world to such an extent that it may be perceived as antiscientific by reference to the ground

rules commonly applied in the natural sciences. The weaknesses in qualitative research notwithstanding, the proponents of each paradigm ought to appreciate the benefits of each worldview and perhaps settle for the philosophical intersection hybrid paradigms that inevitably are born out of the conflict. Qualitative research findings are useful in addressing the inherent complexities that surround health care policy decisions. This is on account of the need to explain the interaction of health care with other macro policies that can best be explained by non-numerical constructs.

This paper gives an account of the historical and contextual background to qualitative research plus the philosophical underpinnings. It further identifies the challenges of qualitative research in health care as applied in the decision making process in Uganda health care system and offers insight into possible solutions. The paper intends to contribute to the discourse on the role qualitative research plays in health care decision making processes and at the same time contribute towards the body of existing literature in this respect. The challenges and solutions discussed in this paper will inform future academic debates which should further shape insights into creating more relevance of qualitative research in influencing health care decisions in Uganda.

METHODOLOGY

This article was based on review of literature which according to Amin (2004), involves the use of secondary data to explain a phenomenon and is an appropriate and reliable approach to scientific research. While using this approach, salient issues on the challenges in qualitative research in health care have been brought to the fore. The old literature was reviewed as the basis for the discourse on philosophical foundations to the article while recent literature informed analysis of the challenges in applying qualitative research in health care in Uganda. In order to strengthen the review, Google scholar search engine using key search words was used to identify journal articles on health care which were selected and reviewed as well as documents from Uganda health care settings. The criteria for selection of journals and reports for the review were based on their ability to provide recent information on the challenges in qualitative research in influencing health care decisions.

RESULTS AND DISCUSSION

In discussing the challenges in qualitative research in health care to inform policy in Uganda, attentions will be drawn on the following parameters, namely, reliability of qualitative research, effects of other macro policies, methodological issues and rigour in qualitative research, inclination of policy makers and donors to empirical evidence as well as resource limitations.

Reliability of qualitative research

The challenges that face qualitative research are

grounded on its inability to provide empirical basis to inform policy and programmatic decisions. Its findings are further diluted by the nature of the process used to undertake the research which does not augur well with the principles of internal and external validity. However, Greenhalgh (2010) has argued that doctors have traditionally placed high value on number based data, which may in reality be misleading, deductionistic and irrelevant to the real issues that relate to health care in terms of perceptions and human nature. He further stresses that the view that qualitative and quantitative approaches to health care research are mutually exclusive has itself become unscientific. In supporting this stance, Bowling (2010) aver that both methods are valid if applied to appropriate research questions, and they should complement each other. In Uganda, planning, monitoring and evaluation of healthcare programmes provide a strong foundation for the realization of quality health service delivery systems. This involves regular collection, analysis and interpretation of health information under the HMIS to guide proper decision-making and design of appropriate interventions. Therefore, establishment of a robust management information system in any health program is crucial for the efficient delivery of health services to the population. Significant progress has so far been registered in regular reporting through a network of districts, health sub-districts and health facilities, linked to the central MoH. Focus is on clinical data which are necessary, but not sufficient, to inform efforts to improve the health of populations. While substantial attention has been focused on these facility-based clinical consultations and the HMIS used to track the relevant data, the broader health information system (HIS) needed to inform decisions at individual, facility, district, and national levels lack the complementarity of qualitative data. The main challenges are data collection and processing mechanisms, regular availability of HMIS tools which do not have provisions for qualitative data, ability of lower level health delivery structures to manipulate and utilize data, and electronic data management which impact on the completeness and timeliness of reporting. For example, Ministry of Health Uganda Annual Health Sector Performance Review (2014) registered completeness of reporting during 2013/2014 as 94% with timeliness of 75%. Against these challenges in managing quantitative data, and the chronic underfunding of the health sector, it certainly would be more challenging to collect and manage qualitative data on a monthly basis in the Uganda HMIS. As such, gaps continue to exist in availability of qualitative data on a more routine basis to inform policy in Uganda health care system.

Effects of macro policies

The government's macroeconomic policy is governed by

a set of interrelated rules and regulations aimed at stimulating the aggregate indicators of its economy. As such, public health policy is difficult to define as most macro policies ultimately have an effect on health (Ovretveit, 2007). In the same vein, public health decision making, and the influence of research, is also more complex. The policy making interactions among different fields, including: fiscal, agricultural, transport, town planning, and crime define the complexities inherent within the nature of information needed to inform policy decisions (Armstrong et al., 2006). The amount and quality of research needed to influence policy decisions in public health goes beyond focus on HMIS based information sources to the wider populations (Ovretveit, 2007). Transferring the concept of “evidence based” from individual clinical data to communities raises the importance of context and means that randomised controlled trials are frequently inappropriate (Kemmer, 2006). Furthermore, evaluations based on prospective experimental designs are simply not possible in many areas of public health (Nutbeam and Boxall, 2008). In this regard, public health evidence derived from the HMIS is neither perfect, complete nor unequivocal and so rarely definitive or robust that they rule out alternative emphases (Hunter, 2009). They always require interpretation using qualitative information in order to be implemented effectively. Suggested additional sources of evidence include which is generated from qualitative data like expert opinion, case study, social values and patient preferences provides the missing link in effective policy decision making (Biller-Andorno et al., 2002; Kemmer, 2006; Klein, 2003). These arguments lend credence to the need for qualitatively generated research information to guide the policy making process. In the future, as methodologies for assessing the effectiveness of complex interventions are developed, the impact of such processes that integrate qualitative research will become clearer. However, the challenge encountered in the Uganda health sector is the inadequate capacity to coordinate and fund research which is multisectoral in nature where qualitative information would be generated. Such research would include other sectors which have influence on the policy decisions on health care like agriculture, education, environment among others and generate qualitative information to enrich the policy making process. The UNHRO which is mandated to coordinate research on health is underfunded and therefore limited in fulfilling its mandate. In the absence of coordinated multisectoral research, generation of qualitative information has continuously been undermined with heavy reliance on health facility based quantitative information to inform policy. Yet it is necessary that public health evidence must cover, not just the question of effectiveness of interventions derived from numerical data; but also organisation, implementation and feasibility, which are less commonly covered by research evidence (Klein, 2003).

Methodological issues

Whereas qualitative research methods have become increasingly popular in healthcare research in recent years, there are issues about the quality of the data produced (Dawn, 2007). Researchers have fiercely debated the relative merits of quantitative versus qualitative methods of research (Holloway and Wheeler, 2002) and proponents from both sides of the debate have been accused of being separatist and defensive (Demetrius and Bryan, 2012; Murphy et al., 1998; Darbyshire, 1997). Most early qualitative research was dominated by ethnographic and participant observation studies (Grbich, 1999). These were often longitudinal and largely considered unsystematic, unscientific and time consuming (Holloway and Wheeler, 2002). Although there is evidence of rigorous data collection in qualitative research, they are criticised for poor analysis and design to the extent that such information may not be relied upon for policy makers to make decisions. The fact that there are limited resources dedicated for research under health in Uganda, preference is towards supporting quantitatively oriented researches which require relatively less resources. This is evident in some of the studies carried out in Uganda for example in the Uganda Demographic and Health Surveys, the Aids Indicator Survey (2011), and the Carne Survey (2010) which were heavily quantitative with some components of qualitative data collection methods. There is a general notion that qualitative research findings cannot hold fort in influencing health care policies in Uganda given the lack of numerical evidence as well as the influence of the researcher has on the findings. This can partly be explained by the largely positivistic medical doctors populating the top positions where policy decisions are made in the MoH. In addition, securing parliamentary approval of policies and legislation demands the use of empirical evidence to defend a policy position. The latter position undermines even the little support from the hard scientists for qualitative research information to influence policy decisions given the inductive nature through which findings are generated.

Inclination of policy makers and donors to empirical evidence

The emergence of qualitative research in primary healthcare has been gradual (Pope et al., 2000), but has equally faced intense scrutiny and harshly criticised. Barbour (2001) argues that the question is no longer whether qualitative methods are valuable but how rigour can be assured or enhanced. The influence of epistemology among the scientific oriented senior management teams in the Ministry of Health in Uganda on the production of evidence determines its use. Some of the criticisms aimed at qualitative research and in

particular at the grounded theory approach are concerned with the iterative approach that involves adapting research methods as the data-gathering generates new information during the process of the study. Researchers have been accused of moving their goalposts (Greenhalgh and Taylor, 1997) which can result in a lack of focus as researchers become unclear about what they are investigating. In addition, qualitative research is seen to provide multiple truths thus generalizability of findings as applied in quantitative research is not possible. Uganda being a multiethnic community cannot facilitate transferability (the equivalence to generalizability) of qualitative research findings. The peculiarities in social constructs that influence health seeking behaviours influence policy decisions yet they cannot be addressed through naturalistic inquiries. Critics (Bendassolli, 2013; Atkinson and Delamont, 2006; Onwuegbuzie and Leech, 2005) further argue that qualitative research is concerned more with discovery and description of phenomenon but does not provide for verification of its findings neither does it consist of proposing and testing hypotheses. Their primary interest is to achieve understanding of a particular situation, or individuals, or groups of individual, or (sub) cultures, etc., rather than to explain and predict future behaviors as in the so-called hard sciences. As such, it is difficult to convince different stakeholders through qualitative research findings especially where resource allocation is concerned. In Uganda, most of the funding to the health sector is from development partners and they have a lot of influence on health policy priorities. In order to attract funding or maintain financial inflows into the health sector, there is need to provide empirical justification which cannot be addressed through qualitative research. For example, United States of American is one of the major donors to the health sector budget and the value for their money as well as monitoring and evaluating performance can only be realized through numerical variable of key health outcome indicators. Even when the rigor of qualitative research is strong in its own merit, no amount of efforts will convince such donors to support the health sector since in their opinion, qualitative research is not worthy of the respect it has earned in other countries. In the event of empirical information needed for planning for health care in Uganda, findings generated through qualitative research are unlikely to be used. For instance, the Uganda Health Sector Strategic Investment Plan III (MoH, 2010) which is the basis for planning, budgeting and resource allocation does not have any provisions for qualitative indicators. The implications are that such approach to research in health care is not a priority and cannot be supported with funding. In this case, the main challenge faced in use of qualitative research for health care is based on the need to attract donor support given their inclination to high level empirical evidence to inform policy.

Resource constraints

According to the Uganda Ministry of Health Sector Strategic Investment Plan III (MoH, 2010), the conduct of research by various organisations in Uganda has so far been hampered by the lack of a policy framework, an uncoordinated priority setting of the research agenda, inadequate funding and logistics. As a result, research has mainly been donor driven. This is more pronounced in situations where research requires qualitative approaches which are rather expensive. UNHRO (2009) further identifies the lack of incentives, training and retention of full time researchers especially in qualitative aspects as the other constrain to generation and use of research findings to inform policy. Other challenges include identified include the limited the translation of research findings into policy and the dissemination of results. In addition, there are no regular meetings of researchers and policy makers to turn research findings into policy. Finally, there is lack of a national database for research done hence rendering it difficult to access.

Implications for policy and future research

The analysis in this paper has identified some outstanding issues that have policy implications and call for research to make a contribution and allow for a better understanding of the opportunities and possible solutions to the challenges facing use of qualitative research to strengthen decision making for health care in Uganda. The resource constraints inherent within UNHRO operations should be addressed in order to improve the human resource capacity at national level in qualitative research. Currently, the foundation source of information for the Uganda HMIS is heavily dependent on health facility whose quality is questionable. As such the need to strengthen human resource capacity in district local governments require urgent attention. This will also require a review of the entire HMIS in order to integrate qualitative data that will support the current numerically based information for health policy. Finally, the findings of this review calls to further research to generate more supportive evidence that will further benefit the current debate on the need to integrate qualitative information within the Uganda HMIS for effective policy decisions.

Conclusion

The fact that quantitative concepts cannot themselves be quantified lends more credence for the need of qualitative data. This is grounded on the understanding that some research areas in health care; like social and cultural factors which influence health seeking behaviours; need more understanding than mere measurement. As noted earlier in its philosophical underpinnings, qualitative

research is premised on important philosophical ideas concerning human nature, society and the nature of knowledge concerned associated with the methodological position of naturalism. The naturalistic perspective and interpretative understanding of human experiences in health care are important in shaping the understanding factors which affect human kind health attributes. Its importance in health care research is grounded on its ability to give quantitative research findings more explanatory credence. This paper identifies some of the major challenges and possible redress mechanisms in use of qualitative research findings in health care in Uganda. The reliability of qualitative research, effects of other macro policies, methodological issues and rigour in qualitative research, inclination of policy makers and donors to empirical evidence as well as resource limitations are some of the limitations faced in this respect. It is therefore important that the limitations cited in this article are addressed to lend more credence in the quality of health care research in order to rationally inform policy decisions in Uganda.

Conflict of interest

The author declared no conflict of interest.

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