Improvement of health outcomes through the contribution of entrepreneurial theories in Kenyan communities

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ABSTRACT

Community Health Workers play an important role in the community strategy program in Kenya. They drive the crucial role of broadening access and coverage of health services in remote areas and undertake actions that lead to improved health outcomes. However, a lot of concentration on improvement of health outcome through this cadre of health workers has been purely a human health science issue and the progress of the process has been a bit slow. On the other hand, Community Health Workers potentials have also not been fully utilized due to their low economic status. Studies have shown the importance of having forces pushing the background factors to influence health outcomes. The one possible force is the driver influencing the socio-economic factors. The aim of the study is to inject an entrepreneurial model into the existing health model to drive the socio-economic aspect in the hope of improving the Community Health Workers economic status and the community health outcomes.

Keywords: Community Health Workers, Entrepreneurial Theories, Health Belief model

Introduction

Community Health Workers (CHWs) perform an important role in the community strategy program in Kenya. They drive the crucial role of broadening access and coverage of health services in remote areas and undertake actions that lead to improved health outcomes. However, a lot of concentration on improvement of health outcome through this cadre of health workers has been purely a human health science issue and the progress of the process has been a bit slow. On the other hand, CHWs potentials have also not been fully utilized due to their low economic status. The other problem identified is the health outcome framework which describes health outcomes in terms of background factors, namely; demographic, socio-cultural, environmental, food-security and health systems. The proximate factors are the health seeking behavior and lifestyle i.e. preventive and curative measures. What lacks in this model is the force pushing the background components to influence performance. As far as studies are concerned, it is important to have forces pushing the background factors to influence health outcomes. One possible force is the driver influencing the socio-economic factors. It is necessary therefore to explore the influence of entrepreneurship in the CHWs performance. Kibas (2005) suggests that rural entrepreneurship has been recognized as an “engine” for economic transformation among the rural poor while literature reveals that rural entrepreneurship has become a focal point for efforts to stimulate and support private and public entrepreneurship development in communities throughout the world (Wortman, 2006). It has been recognized as a strategic development intervention that could accelerate the rural development process (Miranda, 2008). Pertin (1994) argues that the entrepreneurial orientation to rural development accepts entrepreneurship as the central force of economic growth and development. The entrepreneurial activities result in creation of income and wealth for families and at the same time remove scarcity for commodities by introducing innovative products and services (Wortman, 2006). It also helps to increase gross national products and the per capita income, which is an important yardstick for measuring economic development. The study seeks to highlight some of the entrepreneurial theories, their corresponding entrepreneurial behavioral factors and to explore the influence of entrepreneurship in CHWs performance.
Attitudinal Theory in Entrepreneurship

Reigeluth (1999) indicates that Attitudinal Theory has three major components—cognitive, affective and psychomotor domains. To accomplish an attitudinal change, all three components need to move in the same direction on the continuum of primary-intermediate-target attitudes. With the three components of an attitude at the same place on the range, there is internal consistency in the attitude. If the three components are not at the same stage, there is attitudinal conflict. The aim of attitudinal theory is to get all three components in the same proportion before trying to move them towards the new attitude. This dissonant component(s) will be the focus of inching the attitude, step-by-step closer to the new attitude. By addressing this component and consequently any other element that may suit the new dissonant element will gradually move the learners towards adopting the new attitude.

The advantages of this theory are: it assist the learners modify their attitudes as long as they are agreeable to do so; it is a greatly ethical, compassionate approach and lastly the events assist the learner maintain a new attitude and transfer it to real-life situations (Reigeluth, 1999). The disadvantages are that: the attitude may be diverse for each individual learner and is activated by a need; if learner is not agreeable to modify, attitudinal instruction will not affect; lack of application from this theory and difficulty to address the most interdependent from these three components of attitude: affective, cognitive, and behavioral. Attitudinal theory can therefore be defined as a process of influencing ones perception to a new attitude, maintaining and transferring it to real life situation.

According to Morris (1998), entrepreneurship has attitudinal and behavioral components. Attitudes are an important explanatory variable of entrepreneurial actions through its influence on intention (Izquierdo, 2011). It is referring to the willingness of an individual or organization to embrace new opportunity and take responsibility for effecting creative change. This willingness is sometimes referred to as entrepreneurial behavior which involves the set of activities required to move the concept through key stages in the entrepreneurial process to implementation. Morris (1998) suggests that underlying entrepreneurial attitudes and behavior have three key dimensions: innovativeness, risk-taking and pro-activeness. Innovativeness refers to being creative in an attempt to find solutions to particular problems and needs. When an undertaking demonstrates some amount of innovativeness, it is considered an entrepreneurial event and the person behind it an entrepreneur. Risk taking involves the willingness to commit significant resources to opportunities in a moderated and calculated way while having a reasonable chance of failure. Pro-activeness is concerned with bringing of the concept to realization, which involves considerable perseverance, adaptability and willingness to assume some responsibility for failure.

The issues arising from this theory are three components of attitudinal change which include; cognitive, affective and psychomotor domains; the three components needing to move in the same direction on the continuum of primary-intermediate-target attitudes, with three components of attitude in the same place on the range, there is internal consistency. In the entrepreneurial angle the attitudinal theory refers to the willingness of an individual or organization to embrace new opportunity and take responsibility for effecting creative change. The inclusion of attitudinal change in entrepreneurship to health promotion models would give an interactive perspective that should influence better health outcomes.

Intensity Theory of Entrepreneurship

Morris & Sexton (1999) indicate that the concept of entrepreneurial intensity (EI) was introduced to capture both the degree and amount of entrepreneurship within an organization or a given business. It hypothesized that levels of EI are significantly associated with measures of company performance. The relationships were strongest when more weight was placed on the degree versus the amount of entrepreneurship demonstrated by a firm.

The frequency and degree of entrepreneurial activities determines the intensity of the entrepreneurship (Morris, 1998). It brings out the nature of entrepreneurship with the above ideas into perspective. In this model, the Input-Output approach definitions to entrepreneurship are expounded to incorporate the variable nature of entrepreneurship such as the intensity of entrepreneurship. The input component focuses on the entrepreneurial process itself and the five key elements that contribute to the process include environmental opportunities such as demographic changes, the development of a new technology or a modification to current regulation, the individual entrepreneur who assumes the responsibility of conceptualizing and implementing a new venture and the entrepreneur developing some type of business concept to capitalize on opportunities to address particular needs within the business, implementing the new venture in some type of organizational context e.g. as a sole
The output component informs the outcome of the process. The results can be any number of entrepreneurial events and how varied they are. Based on this form of intensity, final outcome can include one or more going ventures, value creation, new products and processes, profit and economic growth. The other outcome can be failure which comes with economic, psychic and social costs associated with failure. This model does not only give a comprehensive picture of the nature of entrepreneurship but can be applied to different levels of entrepreneurship. At organization level, the model describes the phenomenon of entrepreneurship in both startup companies and also developed ventures within a strategic large business. It similarly describes a nonprofit organization with output taking on slightly different interpretations, such as growth measured in number of volunteers or dollars of contributions. Morris (1998) argues that this framework is a prerequisite for successful entrepreneurship and importantly the framework is descriptive of entrepreneurial efforts in organizations of all sizes and types. Consequently, significant implications can be both for prospective entrepreneurs and practicing managers.

Entrepreneurial Intensity is the linear combination of “degree of entrepreneurship” or the extent to which events are innovative, risky and proactive or the frequency with which entrepreneurial events occur. To visualize this, entrepreneurship must be conceived of as a vector in three dimensional spaces, firms or groups of entrepreneurs that are highly innovative or proactive but highly risk averse, firms or groups of entrepreneurs that are highly innovative and risk-taking but lack proactiveness and lastly entrepreneurs who have more or less balanced entrepreneurial orientation. The above theory can be applied to various categories of entrepreneurs or organizations and departments within an organization. Heilbrunn (2008) reveals a significant increase of entrepreneurial activity of communities in terms of frequency, degree and intensity of entrepreneurship and concludes that organizational size and age have an impact on entrepreneurial intensity as well as the existence of an “entrepreneurial vehicle.”

Shane (2003) observes intensity in two aspects namely, capital and advertising intensities. These were used to explain the influence of entrepreneurial intensity in new organizations. New organizing efforts are inhibited by capital intensity of the organization because the development and initial exploitation of an entrepreneurial opportunity results in negative cash flow for a certain period of time as the venture incurs the cost of plant, employee and equipment to generate opportunity.

From this theory, it is evident that entrepreneurial behaviors are unlikely to yield results if the entrepreneurial level is not intensified. The issues arising from this theory can be categorized into two context input and output components. Input components include the demographic changes in the organization such as age and size, type, financial resources, new technology. The output component includes more ventures, value creation, new products and processes, profit and economic growth. The entrepreneurial intensity according to this theory should be in relation to entrepreneurial characteristics such as innovativeness, proactiveness and risk taking. The entrepreneurial characteristics with emphasis on their intensity can be used to move the other elements in health to produce better outcomes.

Self-efficacy Theory

Self-efficacy derived from social learning theory (Bandura, 1997) refers to an individual’s belief in their personal capability to accomplish a job or a specific set of tasks. Self-efficacy is therefore a useful concept for explaining human behavior as research reveals that it represents an influential role determining the individual’s choice, level of effort and perseverance. (Chen et al., 1998; Pajares, 2002). Entrepreneurial self-efficacy has been widely discussed by scholars and is seen as one of the predictors of job satisfaction. Job satisfaction can be considered as an attitude that involves an effective reaction to one’s job (Weiss, 2002). Although entrepreneurs do not have jobs in a traditional sense they indeed have tasks when achieving their business pursuits (Bird, 2002). Self-efficacy is perceived to have a number of practical and theoretical implications for entrepreneurial success because initiating a new venture requires skills and mind set which maybe far different from managers in a fully established organization (La Noble et al., 2000). Chen et al. (1998) develop a measure that included individual’s assessments of their marketing, innovation management, risk taking and financial control skills. The variables used included age, gender, educational level, the number of entrepreneurial friends and relatives, and
the number of entrepreneurial courses taken. The most significant findings are that innovation and risk taking differentiated managers from entrepreneurs. The entrepreneur is more task motivated while the manager is more hierarchically motivated.

Therefore the role of entrepreneurs is driven by five motive patterns that include: need to achieve through one’s own efforts; maintain locus of control over outcomes by avoiding risks and leaving nothing to chance; obtaining feedback on the level of results of one’s performance and desire to introduce innovation and desire to think about the future. Kim & Hunter (1993) used meta-analysis to empirically demonstrate that an intention successfully predicts behavior and attitudes successfully predict intention. Caliendo et al. (2008) bring another theoretical proposition of a positive correlation between risk attitudes and the decision to become an entrepreneur. Psychological research posits an inverse U-shaped relationship between risk attitudes and entrepreneurial survival.

The issues that arise from this theory include belief in one’s personality, level of effort and perseverance, demographic factors such as age, gender, education level number of friends and relatives and number of courses taken. Entrepreneurial characteristics such as innovativeness, risk taking, financial control and marketing skills need to achieve a locus of control. The above factors considered influence performance and they could be injected in the existing health models to enhance performance in health.

**Expectancy-value Theory**

Expectancy value theory is directly linked to uses and gratifications theory. According Palmgreen (1984) such an approach predicts that when more than one behavior is possible, the behavior chosen will be the one with the largest combination of expected success and value. Expectancy-value theories hold that people are goal-oriented beings. The behaviors they perform in response to their beliefs and values are undertaken to achieve some end. Locus of control is grounded in expectancy-value theory, which describes human behavior as determined by the perceived likelihood of an event or outcome occurring contingent upon the behavior in question, and the value placed on that event or outcome. More specifically, expectancy-value theory states that if someone values a particular outcome, the person believes that taking a particular action will produce that outcome, and they are more likely to take that particular action. Weiner (1974) states that the “attribution theory assumes that people try to determine why people do what they do, i.e., attribute causes to behavior.” There is a three stage process which underlies an attribution. Step One: the person must perceive or possibly observe the behavior. Step Two: is to try and figure out if the behavior was intentional. Step Three: is to determine if the person was forced to perform that behavior. The latter occur after the fact, that is, they are explanations for events that have already happened. Expectancy concerns future events and is a critical aspect of locus of control. The issues from this theory include the view that people are goal-oriented, the central concepts are in uses and gratifications, and to motives for behavior and locus of control. Motivations, locus of control and gratifications are concepts that have similar influence on performance as it makes individuals to focus on end results. These can be utilized in the health models to bring about better health outcomes.

**Psychogenic Needs Theory**

Theories of personality based upon needs and motives suggest that our personalities are a reflection of behaviors controlled by needs. While some needs are temporary and changing, other needs are more deeply seated in our nature, these psychogenic needs function mostly on the unconscious level, but play a major role in our personality (Murray, 1938).

Murray (1938) identifies needs as one of two types: primary needs which are based upon biological demands, such as the need for oxygen, food, and water; secondary needs which are generally psychological, such as the need for nurturing, independence, and achievement. Kendra (2008) indicates that among the needs identified are those for achievement, intimacy and power. The need to achieve is another theory of a more visible need in the society. It fuels performance in the worlds of sports, music, politics, media and certainly business (Colan, 2004) since unfulfilled need leads to frustration, disappointment and a decreased sense of self-worth (Colan, 2004). Katz (2003) reveals that a need to achieve is a controversial characteristic in entrepreneurship while McCelland (1961) identifies three attributes from his overall theory of needs for achievement as characteristics of entrepreneurs namely individual responsibility for solving problems, setting and reaching goals through their own efforts; moderate risk taking as a function of skill, not chance and lastly knowledge of results of decision/task accomplishment (McCelland, 1961). This sparked a lot of studies that confirmed the relationship
between entrepreneurs and the need to achieve. The concept of need to achieve is the strongest element in the psychogenic need theory that can be borrowed to influence the health outcomes.

**Health promotion theories**

**The Health Belief Model**

The Health Belief Model (HBM) (Becker, 1974) is one of the oldest theories and subsequent amendments were made to accommodate evolving evidence generated within the health community about the role that knowledge and perceptions play in personal responsibility. HBM suggests that behavior change is a result of a rational process in which decisions are based on beliefs about a health action, its benefits and costs. Theories of reasoned action and planned behavior focus on peoples intentions to change their attitudes, beliefs and sense of control over their lives (Ajzen, 1991). They highlight the need to understand a person’s beliefs about a health issue, such as smoking and are concerned with the influence of significant others such as family, friends and peers.

Janz & Becker (1984) provide a summary of the total 46 HBM studies (18 prospective, 28 retrospective). Twenty-four studies examined preventive-health behaviors (PHB), 19 explored sick-role behaviors (SRB), and three addressed clinical utilization. A "significance ratio" was constructed which divides the number of positive, statistically-significant findings for an HBM dimension by the total number of studies reporting significance levels for that dimension. Summary results provide substantial empirical support for the HBM, with findings from prospective studies at least as favorable as those obtained from retrospective research. "Perceived barriers" proved to be the most powerful of the HBM dimensions across the various study designs and behaviors. While both were important overall, "perceived susceptibility" was a stronger contributor to understanding PHB than SRB, while the reverse was true for "perceived benefits." "Perceived severity" produced the lowest overall significance ratios however, while only weakly associated with PHB; this dimension was strongly related to SRB.

"The Stages of Change Model” identifies five stages of change in behavior: pre-contemplation, contemplation, preparation, action and maintenance (Prochaska & DiClemente, 1980). It can be used to tailor interventions to the stage people have reached in the change process, for example an individual who wants to lose weight. The Health Action Model was also developed and takes account of beliefs, normative influences and motivating factors, including attitudes, along with other strong motivating forces, such as hunger, pain, pleasure and sex, in order to understand behavior. Identity and self-esteem are also important mediating factors (Tones & Green, 2004). The model emphasizes the need for facilitating factors, such as a supportive environment or the possession of personal skills, to support the translation of behavioral intention into action. The model illustrates that health behavior of people is dependent, to a large extent, on the conditions of their lives, which for many are beyond their control. For example, people on low incomes and who feel socially excluded are most likely to smoke (Royal Society of Public Health, 2009).

Because health is influenced by so many factors, including external conditions (social, economic and environmental), many projects and programmes focus on change at the community or system level (Royal Society of Public Health, 2009). Health promotion has a strong emphasis on community development and engagement. Community development itself draws on several important theories concerned with the building of groups, inter-sectorial collaboration and organizational change. To understand a community, we need to know about the motivation and capacity to respond to families, social networks, and local organizations.

The key element from this theory is to predict behavioral response to the treatment received, decisions based on beliefs about its benefit and cost, beliefs are influenced by significant others as family and peers, and perception of situation such as perceived barriers, benefits and severity. These are relevant to influence perception on health seeking behaviors that can improve health outcomes.

**Dialogue for effective Health Action**

According to Kaseje (2006), partners need to engage in an interactive process of dialogue based on available and current information. This approach works because it links action to available evidence, demonstrates progress towards the goals set by the partners, and justifies continued action based on accountability and responsibility. The process involves joint assessment and dialogue as well as joint planning and action (ADPA), each
stakeholder concentrates on elements of their core business that contribute to the common goal of health improvement. Many workers have demonstrated that regular planning based on informed dialogue can facilitate change through enhanced self-efficacy (Bandura, 1997).

Dialogue forums are organized to synergize efforts and motivate each other through ADPA. In this way each sector achieves their own objectives, according to their mission, while bringing about health improvement among populations they serve as they deal collectively and severally with complex causative factors beyond the health sector. This approach focuses on filling the gap between the possible and the current situation by many concerned partners towards a common goal (Oldham, 2004). It applies principles of appreciative inquiry methods (Cooperrider & Srivastas, 1987) and continuous improvement (Berwick, 1998). The outcome of discussion is transformed into a plan, focusing first on a small number of positive deviants but aiming for the tipping point of 20% of the target group informed by data (Rogers & Shoemaker, 1971).

Dialogue ensures that health professionals test their theoretical frameworks on the real life experiences of the clients and communities, and discuss opportunities and limitations of various alternatives proposed. In this way the professionals are transformed from being top down service providers to joint problem solvers, with a deeper appreciation of the role and capacity of people to enhance their control over their situations.

An entrepreneurship-health model has been derived from the above theories to inject entrepreneurship into health models to improve health. This model suggests that there is an interaction between entrepreneurship and background factors that have great influence on health outcome through health seeking behavior.

**Figure 1: Interactive Entrepreneurship - Health behavior outcome model**

![Diagram of Entrepreneurship - Health behavior outcome model]

Source: Researchers model (2010)

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