



# Methodological Complexities in the Study of Health Tourism: A Study of the Appropriation of Indigenous Herbal Sexual Stimulants and Fertility Enhancers in Zimbabwe



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## Abstract

The study of health tourism based on the consumption of traditional herbal sexual stimulants and fertility enhancers is an exceptional ordeal. Research in this field has proved methodologically demanding as the population constitute the hard-to-reach group (hidden populations). Consumers of these traditional herbal prescriptions generally are floating populations and socially invisible thus getting hold of them poses major challenges. This paper focuses on highlighting the issues underlying the study of hidden populations, with a particular focus on traditional herbalists and the consumers of indigenous sexual stimulants and fertility enhancers. Certain specific methodological challenges are faced by researchers working with hidden populations, and this paper explores these in the field of health tourism based on the consumption of indigenous herbal medicine. Particular focus is paid to the methodological challenges involved. The paper's main contribution is to highlight and emphasize the methodological problems that emerge when studying socially invisible populations and to showcase the inadequacy of some existing methods to recruit these hidden populations.

**Keywords:** Research methodology; Methodological complexities; Hidden populations; Health tourism; Ingenious sexual stimulants; Indigenous Fertility Enhancers; Appropriation

## Introduction

The study departed from the conjecture that the contribution of traditional herbal medicine for sexual stimulation and fertility enhancement' in anchoring health tourism development has continuously been overlooked and underestimated despite the herbal industry globally being ranked a billion-dollar industry. The study opens up a field that has generally been snubbed by researchers but has the potential to be of both economic and health-related benefits especially to underdeveloped societies. Highlighting the methodological challenges that characterize this field is expected to lead to the development of better methodological frameworks for studying the hard-to-reach populations. The findings indicate that there is a need for a paradigm shift in the traditional herbal industry if the industry is to gain commercial relevance in Zimbabwe. The study findings bring new insights regarding health tourism based on the sole

consumption of indigenous herbal sexual stimulants and fertility enhancers, the challenges faced in studying the phenomena, the theoretical and practical implications as well as limitations and future research directions.

## Background to The Study

Challenges of gathering accurate data about the behavior and composition of some social groups normally arise in most research. Coming up with ideal sampling and data collection technique in the study of socially invisible populations has generally proved difficult. Socially invisible populations sometimes referred to as hard-to-reach populations generally are referred to as hidden because they are difficult to find and recruit for studies as they often actively try to mask their identity [1]. Such groups include drug abusers, gays, prostitutes especially teens, and lesbians; HIV affected persons, illegal

immigrants, sex workers, homeless people [1] Systematic sampling has been one of the recent sampling techniques to be prescribed for studies that deal with hard-to-reach populations. However [2] posit that systematic sampling and data collection among the floating and socially invisible populations has presented major methodological challenges for social scientists.

This inability to gather accurate information about certain social groups has presented challenges for researchers [3-4]. posit that traditional herbal medicine consumption as a field of research has seemingly received very limited scientific research. This comes despite the fact that literature points to increased use of traditional medicines globally, as much as 80 % [5-9]. Globally people have remained pluralistic consumers, being more pronounced in third world countries like Zimbabwe. However, certain specific methodological challenges present problems for researchers studying such kind of socially invisible populations. This manuscript sought to showcase the methodological challenges associated with surveys that seek to explore the dynamics involved in the use of herbal substances for sexual stimulation and fertility enhancement. Traditional herbal medicine has become symbolic, an alternative that ensures satisfaction and healthy living in the life of today's "health conscious generation" [10]. observes that a health tourist traveler is driven by a burning longing to consume possible alternatives that guarantee satisfaction and a healthy living. Traditional medicine through the ages has continued to play this part in healthcare [11-12]. Several scholars such as [10,11,13-14] define herbal medicine differently. However, in this paper, the definition by the University of Maryland [15]. which defines herbal medicine as "plants, seeds, berries, roots, leaves, bark or flowers for medicinal purposes" was adopted.

Traditionally indigenous plants have played a major role in the treatment of human diseases [16]. argues that for some communities' traditional medicine remains the only remedy that is available, affordable and accessible. These herbal medicines have stood the test of time for their safety, efficacy, cultural acceptability and lesser side effects [17]. Traditional medicine provides a cheaper alternative to modern health provisions especially for poor communities [4,18,19]. With modern medicine being a shelf beyond the reach of many, indigenous herbal medicines provide an effective and affordable alternative for economically underprivileged countries like Zimbabwe. A large section of the African societies even today still remains religiously committed to the consumption of African traditional medicine [20]. [21] Statistically, in Zimbabwe, [20]. puts the figure at 80% of those still dependent on traditional medicine. According to Clement et al. (2007) globally, communities perceive herbal remedies to be more efficacious than conventional medicines. Herbal medicines have been known to be effective in the treatment of such problems as boils, infertility, STD's, typhoid, yellow fever, menstrual and infertility problems [22]. Apparently, some traditional herbal substances/medicines

have gained international prominence in the cure of certain conditions. However, the field of health tourism based on the consumption of traditional herbal medicine is characterized by an absence of a clear methodological expose that can be used to analyze the phenomenon. In the midst of the growing global fascination with indigenous herbal medicine, current research has continued to pay limited attention to the methodological challenges that characterize research in this field. This paper reflects on the methodological complexities that characterize studies in this field of traditional herbal medicine consumption using a case study. The population involved in the prescribing, dispensation and consumption of indigenous herbal sexual stimulants and fertility enhancers can be classified as a floating population. Posits that floating populations usually have no fixed address and is less likely to be found at home or to agree to an interview and this presents a particular challenge for recruitment to a study. These minority social in most cases are socially invisible, hidden effectively within the larger existing population presenting researchers with a particular challenge for respondent recruitment [23].

A case in point is the study of health tourism in the context of the consumption of traditional herbal medicines specifically for sexual stimulation and fertility enhancement. It is not easy to execute due to methodological conundrums. Hence, this conceptual paper isolates and reflects on a host of methodological complexities that characterize studies on health tourism using case material from the appropriation of indigenous herbal sexual stimulants and fertility enhancers by tourists in Zimbabwe. The researchers hope to shed light on the methodological disjuncture that characterizes any attempts to study and theorize in this genre of health studies (health tourism).

### Methodology

Studying floating populations is an exceptional ordeal due to the lack of a lack of adequate or accepted research methodology [25] assert that there are several ways of conducting research amongst the hard-to-reach populations which include face-to-face interviews, web-internet, mail-questionnaires, and telephone interviews as well as conducting e-mail interviews. In this study, the researchers settled for face-to-face interviews as assert that they provide high accessibility.

### Participants

The study used traditional herbalists (supply side) and consumers of traditional medicine for sexual stimulation and fertility enhancement (demand side) as the study participants. Specifically, only those herbalists who specialize in prescribing and dispensing traditional herbal medicine for sexual stimulation and fertility enhancement were used in this study. The participants were chosen on the basis of their knowledge of the topic under study. The study used participant triangulation, where study respondents from both the demand and supply were involved.

## Sample size

The researcher carried out interviews with 40 participants in order to highlight the methodological challenges and the limitations in applicability of some research methodologies prescribed for studying the hard-to-reach populations. The population of the study consisted of two clusters of participants. Twenty participants were herbalists whilst the other twenty was from the demand side (consumers). Thus, the cluster of herbalists represented the supply side of the health tourism based on traditional medicine whilst the second cluster made up of consumers of the traditional medicine stood for the demand side. A sample size of 40 was adopted as it is said to be consistent with action research [26].

## Sampling techniques

The study adopted non-probability sampling techniques. Convenience and snowball sampling techniques were used to select participants to the study. Convenience sampling allowed the researcher to concentrate on those respondents that could be accessed [25]. assert that in snowball or chain referral technique, subjects that are known are asked to nominate new subjects who in turn after entertaining the researcher are also asked to nominate others. The researchers used intermediaries to gain access to some of the respondents. This study required the knowledge of someone with 'insider knowledge' in order to identify initial respondents [27]. assert that a 'right contact', that is a trusted go-between is a 'critical element' in order to gain access to socially invisible groups.

## Instrumentation

In order to collect the necessary data, several instruments were made use of. The instruments can be classified as both primary and secondary sources.

## Interviews

The researcher made use of an interview guide to conduct interviews with both sets of respondents. Interviews according to [28]. Are "a complex process of communication based on a predetermined purpose designed to get information by asking and answering questions between the interviewer and the interview".

## Observation

Posits that observation can be used to observe the behaviour of respondents in a study [29]. However, the researcher had to carry out these observations in a natural setting as emphasized by [30]. The observations were important as they provided first-hand encounters with the study phenomena, providing checks and balances that validated primary data collected through interviews. The researcher employed non-participative and unplanned observation of respondent behaviour.

## Secondary data

Secondary data refers to information which was compiled for other purposes not necessarily or directly related to the

phenomena or topic under study. However, the information can be applied to the current study and help in addressing study objectives [31]. This paper also conducted a content analysis of qualitative research on challenges faced in studying the hard-to-reach populations. "Qualitative content analysis is a research method for the subjective interpretation of the content of a text data through the systematic classification process of coding and identifying themes or patterns". The method was adopted for the reason that it a non-invasive way of analysing social phenomena.

## Data collection procedure

Permission to conduct the study was granted by The Medical Research Council of Zimbabwe and local authorities in the study focus area (Mashonaland West Province in Zimbabwe). This was of necessity as the study falls into what [32,33] "sensitive research" as it potentially posed substantial threats to those involved as it involved sensitive information that could lead to stigmatization due to its intrusive nature. This review paper interrogated several research studies on the hard-reach-population in other research fields. The results and discussion of the findings based on the defined unit of analysis (interrogated literary works and participants) are presented below.

## Results and Discussion

### The methodological quagmire

The aim of this study was to highlight the methodological complexities in the study of health tourism and appropriation of indigenous herbal sexual stimulants and fertility enhancers in Zimbabwe. Agadjanian and posit that survey designs are notoriously in-effective in studying hard-to-reach populations. The literature strongly argues that marginalized groups such as the homeless, sex workers, HIV patients, lesbians and gays, drug users and illegal immigrants are difficult to access in a systematic way. Health tourists who partake in the consumption of indigenous sexual stimulants and fertility enhancers and the herbalists who prescribe and dispense these medicines constitute the hard to reach populations as well.

### Sampling principles and problems of representativeness

Hidden populations have for long presented major methodological challenges for social scientists. During the execution of this study, sampling proved to be notoriously difficult. The literature clearly points out that one of the major challenges faced when surveying hard-to-reach groups is the absence of sampling frames or their incompleteness (Marpsat & Razafindatsima, [1,34]. Traditional medicine practitioners and the subsequent consumers of these concoctions are floating populations and work very hard to conceal their identity. The current survey designs on the knowledge market proved to be notoriously in-effective in studying this specific group of the hard-to-reach population. Several sampling frames have been used with varying degrees in the study of the hard-to-reach populations. Snowball sampling, a form of purposive sampling

was used to access the study population. The approach is advised in such kind of studies that involve socially invisible groups [33]. In previous studies, snowball sampling has been used with varying degrees of results. This sampling approach has been prominently used in researches on migrants in Russia [34] and China [35]. The sampling technique allows researchers to select “information rich” participants [36]. However, the richness of their input to the study highly depended upon the degree to which the researchers were able to establish rapport and consistently maintain the flow of the conversation with the study participants. However, due to the sensitive nature of the study and associated vulnerability risk made the participants feel very distrustful in some cases. The fear made them try to “protect” their fellow users by refusing to suggest other users or herbalists [37]. call this bias problem in recruitment, the gatekeeper’s bias. These ‘gatekeepers’ proved to be very protective towards their fellow users/dispensers and in most cases proved to be massive hindrances to the researchers’ efforts to access the population under study.

The researchers observed that the population even try so much to hide their identity, maybe this can be attributed to the social pressures they can be subjected to by other members of their broader communities. One well-known herbalist in Chinhoyi (one of the districts in Mashonaland West Province understudy), closed up his prescription and dispensary business and relocated after overtures were made to interview him. He surfaced up in another district within the same province (Kadoma) after a few weeks, when the researcher’s path crossed with his he disappeared again. The probable reason being that he did not have an operator’s license from the Zimbabwe National Traditional Healers Association (ZINATHA) hence the fear of the arm of the law.

### Element of bias

However, though the snowball approach is cost-effective it entails considerable selection bias. When applied to the study of traditional herbal medicine consumption, the snowball approach suffered due to issues of participant selection bias. Friends tended to recruit friends, and it was difficult to establish or break into a new network of consumers [38]. posits most snowball samples are biased because elements in snowball sampling are not randomly selected, but rather are dependent on the subjective choices of the participants first accessed. This, therefore, makes it difficult for researchers to generalize findings to the rest of the population. Thus, it is biased and cannot produce representative findings that can be generalized over the entire population. The samples were in most cases biased towards the inclusion of acquaintances only leading to the ‘isolation’ of those who do not subscribe to any formal social network that the researcher had tapped into. Thus, surveys in the field of traditional medicine consumption specifically those that seek to explore issues surrounding traditional sexual stimulants and fertility enhancement consumption remain mired in methodological complexities. Without a known number

of the target population (herbalists and consumers) it becomes practically impossible to justify sample size and to generalize findings unless the saturation point principle is applied. The demographic information and statistics of herbalists and consumers of traditional herbal medicine of sexual stimulants and fertility enhancers remain largely unknown, hence presenting challenges in coming up with a representative sample size. assert that a sampling frame for such kind of a target population is not yet available [39,40].

### Problems of sample representativeness

Snowballing as a sampling technique also presented to the researcher’s challenges of sample representativeness. The problems of lack of a sampling frame and known numbers of the population present challenges of representativeness for studies on the hard-to-reach populations. In some cases, with other participants, it was difficult to get respondent-referrals to other new subjects. Some of the hard-up participants used the “I mind my own business approach” hence were not forthcoming with referrals. However, this is nothing new as some studies related to hidden populations have suffered the same way [41].

In some cases, the participants especially herbalists for fear of losing potential customers either refuse to propose other subjects or refer only to other herbalists within their circle. This also proved to be the case with consumers as they only referred the researchers to members of their inner circle [25]. this then calls into question issues of representativeness of the sample. Non-representativeness of sample renders it difficult to generalize findings to the entire population. Thus from the study findings, one can safely conclude that one major challenge faced in the study of health tourism based on the consumption of traditional herbal medicine substances for sexual stimulation and fertility enhancement is that of sample representativeness, as either participant or intermediary bias may lead to the omission of other networks. Thus, respondent bias may lead to the exclusion of other potential rich sources of information leading to problems of non-representativeness of the sample.

### Environmental barriers

The researchers also suffered challenges presented by the environmental factors in the selected study sites which the researchers were powerless to control such as cultural, traditional norms and values, hence not all targeted respondents were accessed. Among the Shona of Zimbabwe, avoidance rules are instruments of socialization and social control. Thus, certain issues are regarded as taboo. Such issues include issues of sexual stimulation and infertility, the domains of this study hence challenging to extract responses from participants.

### Problems of accessing inside knowledge

Creating rapport with members of the hard-to-reach social groups takes a considerable amount of time. Getting prior knowledge to start on for researchers is time-consuming and it is also labour intensive to acquire as witnessed in this study.

Thus, to gain the trust and create rapport with respondents is needed in order to gain acceptance into respondent's networks. However, this takes time and still, there is no guarantee of getting "inside knowledge". Getting acceptance into these social groups is highly difficult as most of these socially invisible groups are highly atomized, isolated and impaired as pointed out by [1]. Thus, in such a case, respondents proved to be difficult to identify, access and recruit.

### Unwillingness to share information

One of the major problems encountered with the researchers concerns their willingness as individuals to provide information during survey interviews, especially where it concerns the sensitive issues that define their marginalization. Even in some cases, they agreed to participate in the survey interviews, participants especially women were unwilling to answer sensitive questions dealing with their sexual relationships and sexual experiences due to a combination of insecurities, gender ideologies, and ethnoreligious norms. Due to the sensitive nature of the questions involved, participants felt uncomfortable in entertaining such questions which touch on the core that makes them hidden [1]. assert that the unwillingness of the hidden-populations to share information during surveys lies in the same social characteristics and constraints that hinder their accessibility. The same sentiments are echoed by who castigates that one of the major setbacks of data collection from a hard-to-reach population concerns response rate. Response rate, and especially cooperation rate, is already a major problem in general surveys among the floating populations. cite the 2004 Generations and Gender Survey in Moscow and St. Petersburg which had a response rate of less than 15% as an example of how difficult it is to solicit answers from floating populations. One of the reasons could be because of concerns and fear of social exclusion, incessant harassment by law enforcement authorities (unregistered herbalist), and pervasive public ridicule. Fear of stigmatization also makes both consumers and dispensers of traditional herbal medicine for sexual stimulants and fertility enhancers very hard to recruit for studies. Herbalists and the consumers of these herbal substances are both generally reluctant to engage in conversations with strangers. Finally, even where they agreed to participate in interviews, such respondents especially women were unwilling to answer sensitive questions dealing with their sexual relationships and sexual experiences due to a combination of factors such as insecurity, gender ideology, and ethnoreligious norms. Due to the sensitive nature of the questions involved, respondents were not feeling comfortable in entertaining such questions which touch on the core that makes them hidden [1]. assert that the unwillingness of the hidden-populations to share information during surveys lies in the same social characteristics and constraints that hinder their accessibility. Both consumers and providers of indigenous sexual stimulants and fertility enhancers remain mostly hidden and unwilling to come into the open rendering recruitment for surveys difficult.

### Participant knowledge value

Most herbal medicine value chains in developing countries are dominated by herbalists and traditional healers who mostly prescribe and dispense the herbs in their crude form [9]. There is another crop of players that is mushrooming, that of vendors who purchase the traditional herbal medicines from the traditional herbalists for marketing to the interested health tourist. However, the level of knowledge possessed by this new crop of players regarding the traditional medicine practice remains questionable. In the case of Zimbabwe, the problem has been made worse by the absence of a guiding policy framework to regulate the industry. Thus, the participants of this value chain especially the unregistered herbalists felt threatened by intrusions from the outside and as a result were not forthcoming with information. They also proved to have very limited knowledge about the herbs they were dispensing hence proved to be of very little value to the study as their responses lacked merit in some cases.

### Hostility as a mask of identity

In some cases, some herbalists and herbal medicine consumers proved to be hostile and suspicious of the researchers [40]. asserts that this might be due to research fatigue as the marginalized groups might have been subjected to other researchers before. In such cases, it is necessary to establish rapport with respondents prior to data collection [42] however this needs time to manifest. Due to limited time in which to establish researcher-participant rapport, hidden populations tended to have feelings of distrust and hostility. Literature asserts that participants who would have been subjected to numerous researches, especially in cases where no tangible benefits were received might feel research fatigue hence hostile to continued intrusion by researchers [42].

### Scarcity of Referential Literature

Referential literary material on this form of health tourism remains scarce owing to the limited number of research studies in the field. The methodological challenges associated with studying socially invisible populations have forced researchers to re-focus their attention to other societal problems. There exists relatively very little information on the subject as this is a relatively new field of study. Only a handful of studies have been done, being notable in the Zimbabwean context [43-50].

### Conclusion

The survey complemented by the content analysis of related literature highlighted that conducting surveys amongst consumers and suppliers of traditional herbal medicine for sexual stimulation and fertility enhancement is methodologically challenging. Survey research in this field has proved methodologically challenging as the population constitutes the hard-to-reach group. Consumers of indigenous sexual stimulants and fertility enhancers generally are floating populations and socially invisible thus gaining access to them

poses major barriers to their recruitment. In the face of the growing global fascination with indigenous herbal [51-56]. medicine, modern research has paid very little attention to the methodological challenges that characterize surveys in this field. There is a glaring lack of methodological clarity. The existing knowledge on the knowledge market has failed to provide a sustainable methodology with which to best illustrate and understand the phenomenon. Also, the absence of a sampling framework made recruitment of respondents into the survey very difficult. Establishing respondent networks proved to be notoriously difficult as the population is hidden, and sometimes seeds proved to be overprotective of their fellow network members resulting in what literature calls the “gate-keepers bias”. Participants in hard-to-reach surveys are usually unwilling to share information that defines their social invisibility hence presenting challenges for researchers. This paper is expected to stir interest in this regard and lead to the development of a comprehensive framework that can be used to overcome these methodological challenges. Several sampling frameworks such as snowball, RDS have been used in the study of hidden populations with limited rates of success. Hence this paper is expected to stir a lot of interest amongst researchers and fellow academia’s and challenges them to develop frameworks that can holistically be of use in the study of hidden populations. Researcher observation observed that though the traditional herbal industry in Zimbabwe has the potential to anchor health tourism development, the sector can also contribute significantly in terms of financial gains. However, the absence of a regulatory framework to guide the development and growth of the sector has seen an influx of bogus herbalists now dominating the practice with very questionable credentials. There is urgent need by the relevant authorities to craft and enforce laws that can guide and regulate the sector. The respondents also highlighted a lot of claims of efficacy of the different herbs used to treat problems of fertility and potency of male organs. However, these claims need to be scientifically tested to verify these claims.

### Limitations of the study

There exists relatively very little information on the subject of health tourism based on traditional sexual stimulants and fertility enhancers as this is a relatively new field of study. The respondents in this study who are the travelers themselves and traditional medicinal practitioners due to research ethics had to on their own volition opt into the study research process in order for the researcher to glean rich sources of information. This presented challenges of participant recruitment, adding on to the challenge presented by the fact that the population under study is in most cases socially invisible. Also, the demographic information and statistics of the target population of this study are unknown, hence presented challenges in coming up with a representative sample size. The researcher also suffered challenges presented by the environmental factors in the selected study sites which the researcher was powerless to control such as cultural, traditional norms and values hence not all targeted

respondents participated. The economic problems prevailing in the country also militated against the smooth execution of the research study by posing financial challenges hampering study progress.

### Future Research directions

A similar study using quantitative research methodology is worth proposing in other provinces of the country so that the problem of representativeness and generalization can be dealt with. The studies would chart the rate and put a numerical value to the number of health tourists who travel for the sole consumption of indigenous herbal sexual stimulants and fertility enhancers. the studies would yield quantitative data on the number of people currently participating in this form of health tourism, amount of money being spent, nature and type of herbs being used benefits being derived from the practice for both parties involved and the general psychosocial outcome of the treatments received. There is also a need for further studies to test the herbs scientifically to verify the respondent claims of the efficacy of the herbs used to treat problems of fertility and sexual performance.

### Implications for theory

The present study dealt with the methodological challenges faced when studying health tourism based on the consumption of indigenous herbal sexual stimulants and fertility enhancers. Theories in this study were used as lenses with which to facilitate the understanding of the processes, issues, and forces at play in the phenomena under investigation. However, due to limited literature around this field, this form of health tourism has remained under-theorized. This study found anchorage in several theories such as Theory of Planned Behavior, Dramaturgy Theory, Psychosocial Theory, Expectancy Theory, Stakeholder Theory, and Impression Management Theory. After a critical analysis of all the ‘theoretical jackets’ above, the Social Exchange Theory emerged as overarching, with attributes that give it explanatory validity to all the major themes covered by this study. This theory will be used to understand how human relationships are formed. However, the theory does specify how the interactions that lead to relations forming occur and does not account for the times when the marketplace mentality fails to justify relationship formation. Thus, there is no theoretical jacket that wholly illuminates health tourism based on the consumption of indigenous herbal substances for sexual stimulation and fertility enhancement. Although each of these theories has explanatory validity in the proposed study, the majority of the theories cited above fall short in scope in terms of illuminating all the phenomena under investigation. Hence, most of these theories could be regarded as having mid-range explanatory validity. There is still a need to carry out further studies around the topic and develop a clear methodological and theoretical expose that best exposes this phenomenon under study.

## Implications to practice

The study unearthed gaps in terms of methodology in the study of health tourism based on the consumption of traditional herbal substances for sexual stimulation and fertility enhancement. The phenomena were also found to be lacking in methodological expose. In order to better understand this form of health tourism and to get the best out of this practice, there is need to develop a befitting methodology and have theories which give a wholly explanatory validity to the phenomena. Theories are lenses which aids understanding hence may lead to better service delivery in the practice of traditional medicine.

## Implications to policy

The field of traditional medicine in Zimbabwe does not have a guiding policy framework. Policy plays a fundamental role in guiding and regulating the operations of the traditional herbal industry. In order to function properly and protect health tourists from unscrupulous players that now dominate the traditional medicine value chain, there is a need for a responsible authority to craft well-coordinated regulatory frameworks to guide the industry. The policies should be developed in consultation with all the parties concerned such as herbalists and consumers.

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