

Motivational Factors Influencing Attitude towards Knowledge Transmission by Traditional Medical Practitioners in Rural Communities of South West Nigeria

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Abstract - Using survey design, both qualitative and quantitative data were collected from two hundred and twenty-eight traditional medical practitioners using questionnaire, key-informant interviews and FGDs. The motivational factors investigated were perceived loss of knowledge power, reputation enhancement and expected incentives. Findings from quantitative data revealed that there was no significant relationship between attitude and amount of knowledge transmitted by the TMPs as well as between attitude and each of the motivational variables. However, qualitative data showed that TMPs generally in the region had a positive attitude towards knowledge transmission and mostly transmitted their knowledge because of their desire to enhance their reputation and many would also receive financial incentives. They did not fear losing their knowledge power due to knowledge transmission. The paper recommends a post-positivist approach to studies on knowledge transmission of TMPs in rural communities as this recognizes subjectivity in research by relying on opinions and feelings of respondents.

Keywords: Traditional Medical Practitioners, knowledge transmission, reputation enhancement, perceived loss of knowledge power, expected incentives, Nigeria

I. INTRODUCTION

The role of traditional medicine in primary health care delivery has long been understood by World Health Organization (WHO). Since 1976, WHO has continued to advocate the inclusion of TMPs in primary health care programs by governments, especially governments in developing countries of Africa (WHO, 1978). Most rural communities in Africa continue to depend on traditional medicine due to the absence or inaccessibility of modern healthcare services (Simbo, 2010). Hence, knowledge of traditional medicine must persist in these communities to ensure access to health care by its dwellers. However, previous studies have reported a high rate of decline of traditional knowledge (Anyaku *et al.*, 2015; Olatokun and Ajagbe, 2010; Pardo-de-Santayana *et al.*, 2015). Often, this has been attributed to the negative attitude of custodians of this knowledge towards transmission (Angmo *et al.*, 2012; Maluleka, 2017; Mwangi, 2019; Saric-Kundalic *et al.*, 2010).

The Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975), showed that attitude towards knowledge sharing is a significant predictor of knowledge sharing

intentions (Bock and Kim, 2002; Lin *et al.*, 2016; Rahman *et al.*, 2016). According to this theory, attitude towards a behavior usually precedes an individual's intention towards carrying out the behaviour. Hence, if a TMP has a positive attitude towards transmitting his knowledge to others, he is likely to do so, whereas a negative attitude may lead to little, or no, knowledge transmitted. More than a decade earlier, Mahonge *et al.* (2006) reported that some traditional healers among the Waluguru people in East Uluguru Mountains in Tanzania were not favourably disposed to transmitting their knowledge due to fear of competition for clients which would lower their income. In a study of plant use among the indigenes of Alwar, India, TMPs in the location have a negative attitude towards disclosing their knowledge. It is this knowledge that gives them recognition in the society; hence, they are not willing to share it (Jain *et al.*, 2009).

Studies have shown that certain extrinsic and intrinsic motivational factors are related to attitude towards knowledge sharing (Bock *et al.*, 2005; Lin, 2007; Lin *et al.*, 2016; Lombardi *et al.*, 2019; Nguyen *et al.*, 2019). Extrinsic motivation is when an individual engages in a behavior out of a sense of pressure to perform such behavior or with the belief that incentives will be received in return. On the other hand, intrinsic motivation is voluntary, the individual engages in the behavior because he/she finds it interesting or enjoyable. Studies on knowledge sharing have investigated reciprocal benefits, organizational incentives, reputation enhancement and loss of knowledge power as extrinsic motivators, as well as enjoyment in helping others as an intrinsic motivator (Akhavan *et al.*, 2015; Bock *et al.*, 2005; Chennamaneni, 2006; Lin, 2007; Lombardi *et al.*, 2019).

Considering the focus of this study, perceived loss of knowledge power, expected incentives, and reputation enhancement are considered factors that could influence attitude of a TMP towards transmission of his knowledge. Perceived loss of knowledge power is a situation whereby an individual fears losing his power if his knowledge is transmitted to others. Reputation enhancement is the belief that transmitting knowledge will enhance a person's status in the profession whereas expected incentives are economic benefits in form of money paid by apprentices for

knowledge transmitted by TMPs (Ba *et al.*, 2001; Bock and Kim, 2002; Chennamaneni, 2006). Hence, this study provided answers to the research questions that follow:

1. What is the relationship between attitude of TMPs towards transmission and amount of traditional medical knowledge transmitted?
2. Is there a significant relationship between attitude of TMPs towards traditional medical knowledge transmission and each of perceived loss of knowledge power, reputation enhancement and expected incentives?

The remainder of this paper is structured as follows: the next section provides an explanation of the research methodology. Subsequently, findings and discussion are presented. The paper is concluded by the conclusion and recommendation section.

II. RESEARCH METHODOLOGY

This research was conducted among TMPs in South western region of Nigeria. This region was purposively chosen because of the proliferation of TMPs as reported in literature (Soewu and Adekanola, 2011). South western Nigeria is home to the Yoruba ethnic group and this region covers 6 states namely: Ekiti, Lagos, Ogun, Ondo, Osun and Oyo. A post-positivist methodology was adopted.

The population size of the practitioners could not be determined. Hence, using purposive sampling, one rural community was selected from each senatorial district. Hence, a total of 18 communities were selected. Snowballing method was used in selecting the respondents, as each practitioner introduced the researcher to the next practitioner. Both qualitative and quantitative data were collected from a sample of two hundred and twenty-eight traditional medical practitioners.

Quantitative data was collected using a structured questionnaire with a five-point Likert scale, while qualitative data was collected through key-informant interviews and focus-group discussions. The instruments were translated into Yoruba language. The variables namely, attitude, expected incentives, perceived loss of knowledge power and reputation enhancement were assessed using the self-report method based on a Likert scale from 1 to 5 (Strongly Disagree, Disagree, Agree, Strongly Agree, Don't Know). Frequencies and inferential statistics were used in analysing the quantitative data, while thematic analysis was used to analyse the qualitative data.

III. RESULTS AND DISCUSSION

A. Demographic Characteristics of Practitioners

The demographic data of the TMPs are presented in Table 1. In all the 6 states, male TMPs outnumbered the females. The gendered bias in terms of the type and amount of traditional medical knowledge women are believed to be entitled to most likely contribute to this low level of female participation. According to Olawoye *et al.* (2010), 'women are more likely than men to be absent from decision-making, whether in the household or at the community, national or international levels – either because their contribution is not valued or because they do not have the time, confidence or resources to contribute' (p.16). Also, majority of the TMPs were between 41-60 years. Generally, more middle-aged respondents were observed in the sample except for Ekiti and Lagos States where respondents between 51 to 60 years made up the largest proportion. This shows that traditional medicine in this region is mostly practiced by those who are mature and relatively elderly.

Table 1 shows that the TMPs were predominantly Muslims in Osun, Oyo and Ekiti States whereas Traditional religion was dominant among TMPs in Ogun, Ondo and Lagos States. Interestingly in each state, more than 70% of the TMPs had at least primary school education. The relatively high literacy level among TMPs in this region is a positive one. Majority of the respondents in the category of no formal education were mainly the elderly TMPs. This shows the commendable efforts the TMPs are making in improving their educational status. TMPs in the region strongly believe that the ability to read and write will enhance the transmission of their knowledge and also improve acquisition and utilization of TMK in the study area.

Also, in each state, at least 75% had other sources of income apart from their work of traditional medicine. This was especially observed among the middle aged TMPs. The fact that most of the elderly TMPs were not involved in any other income generating activities shows their full commitment to traditional medicine as a practice. The changing economy and the need to make a better living might have been responsible for the respondents' having other sources of income in addition to traditional medicine.

TABLE I DEMOGRAPHIC CHARACTERISTICS OF TMPs

Characteristics	States					
	Oyo	Osun	Ogun	Ondo	Lagos	Ekiti
Sex						
Male	57.9	54.3	67.5	64.1	59.0	59.5
Female	42.1	45.7	32.5	35.9	41.0	40.5
Age						
31-40	7.9	5.7	5.0	7.7	12.8	16.2
41-50	39.5	51.4	45.0	59.0	23.1	18.9
51-60	31.6	17.1	25.0	33.3	25.6	35.1
61-70	18.4	20.0	12.5	0.0	23.1	16.2
71-80	2.6	5.7	12.5	0.0	15.4	13.5
Religion						
Christianity	15.8	11.4	15.0	12.8	23.1	13.5
Islam	47.4	51.4	40.0	41.0	33.3	54.1
Traditional	36.8	37.1	45.0	46.2	43.6	32.4
Educational Level						
None	23.7	22.9	20.0	0.0	23.1	21.6
Primary	47.4	31.4	35.0	23.1	41.0	51.4
Secondary	28.9	45.7	45.0	76.9	35.9	27.0
Marital Status						
Married	78.9	68.6	82.5	94.9	71.8	81.1
Divorced	0.0	5.7	7.5	0.0	7.7	13.5
Widowed	21.1	25.7	10.0	5.1	20.5	5.4
Other sources of income						
Yes	84.2	77.1	75.0	94.9	79.5	86.5
No	15.8	22.9	25.0	5.1	20.5	13.5

B.Relationship between attitude of TMPs towards transmission and amount of traditional medical knowledge transmitted

1.Findings from Quantitative Data

Attitude of the TMPs is the degree to which they believe that their knowledge should be transmitted (Bock and Kim, 2002). The findings showed that TMPs generally had a positive disposition towards transmission of their traditional medical knowledge. As shown in Table 2, over 90% of the TMPs agreed that transmission of TMK is good, wise and pleasant.

However, Spearman correlation result ($p=0.394$) shows that at a significance level of 0.05, there exists no significant relationship between attitude of traditional medical practitioners towards transmission of their traditional medical knowledge and the amount of knowledge transmitted (Table 3). When this analysis was carried out at each state level, a similar trend was observed as shown in Table 4.

TABLE II PERCENTAGE DISTRIBUTION FOR ATTITUDE, PLKP, RE, AND EI

Attitude	Agree (%)	Disagree (%)
Transmitting my knowledge is harmful	0.0	100.0
Transmitting my knowledge is good	98.2	1.8
Transmitting my knowledge is worthless	0.0	100.0
Transmitting my knowledge is wise	96.9	3.1
Transmitting my knowledge is pleasant	98.7	1.3
Perceived loss of knowledge power		
I will lose my unique value in the community.	2.2	97.8
I will lose my power base in the community.	3.1	96.9
I will lose my knowledge that no one else has.	1.8	98.2
I will lose my knowledge that makes me stand out with respect to others.	3.1	96.9
Reputation enhancement		
Others respect me, when I transmit my knowledge of traditional medicine.	96.9	3.1
Transmitting my knowledge to others improves their recognition of me.	96.5	3.5
I receive praises from people when I transmit my knowledge.	96.9	3.1
I believe my status improves, when I transmit my knowledge to others.	97.4	2.6
Those who transmit their knowledge to others have more prestige.	96.5	3.5
I transmit my knowledge in order to improve my reputation with others.	95.6	4.4
Expected incentives		
I will receive monetary incentives in return for Knowledge transmitted by me.	62.3	37.7
I am strongly motivated by the money I earn When I transmit my knowledge.	55.3	44.7

TABLE III SPEARMAN RANK CORRELATION

			Amount of knowledge transmitted
Hypothesis 3	Attitude	Correlation Coefficient	-.057
		Sig. (2-tailed)	.394
		N	228

TABLE IV SPEARMAN RANK CORRELATION BY STATES

	Amount of knowledge transmitted					
	Ekiti	Lagos	Ogun	Ondo	Osun	Oyo
Spearman Attitude Correlation's rho Coefficient	.247	-.128	-.197	-.048	-.318	.006
Sig (2-tailed)	.140	.437	.222	.773	.063	.972
	37	39	40	39	35	38

2. Findings from Qualitative Data

Although the correlation analysis did not show any significant relationship between attitude of TMPs and amount of knowledge transmitted, however, focus group discussions (FGDs) and in-depth interviews conducted revealed that generally, traditional medical practitioners have very positive disposition towards transmission of their knowledge. One of the reasons for transmitting their knowledge was for community service: “*Because we want to help ourselves*” (FGD participant, Male, Olode Community). “*I want the progress of my community*”. “*So that nobody’s child suffers*” (FGD participant, Male, Agbado Community). For many others too, it was for the preservation of the knowledge. “*This knowledge must not perish, once it perishes, there is no benefit again*” (Key informant, Male, Kajola Community).

Previous studies have reported loss of traditional medical knowledge because their custodians died without transmitting their knowledge (Giday *et al.*, 2003; Ibrahim *et al.*, 2007; Olatokun and Ajagbe, 2010). For example, among the Zay healers of Ethiopia, the identity of a medicinal plant which was used as a remedy against snakebites was lost because custodians of the knowledge kept it secret and died without transmitting the knowledge to anyone (Giday *et al.*, 2003). Saric-Kundalic *et al.* (2010) interviewed 12 traditional medical practitioners in Prokosko Lake village of Bosnia and Herzegovina and reported that traditional

medical knowledge in this region was endangered because the custodians of this knowledge were not transmitting to the younger ones. Angmo *et al.* (2012) reported a low level of knowledge transmission from the custodians to the younger generation in their study of traditional healthcare system in the villages of Kargil district, Western Ladakh, India.

However, findings from this study which show a positive attitude of TMPs towards transmitting their knowledge is similar to that of Haetta (2010) who observed that in Marka Sami villages of Norway, TMPs are generally willing to transmit their knowledge and most times have an understanding of who the recipient of the knowledge should be. Other studies though not among traditional medical practitioners have also shown that there exists a relationship between attitude of an individual and knowledge sharing behaviour (Jolae *et al.*, 2014; Lin *et al.*, 2016; Zain *et al.*, 2019).

C. Relationship between attitude of TMPs towards traditional medical knowledge transmission and each of perceived loss of knowledge power, reputation enhancement and expected incentives

In investigating the relationship between attitude of the TMPs towards knowledge transmission and each of the 3 variables, PLKP, RE and EI, Pearson Product Moment Correlation (PPMC) was used. Table 5 presents the results of the correlation.

TABLE V RELATIONSHIP BETWEEN ATTITUDE AND EACH OF PLKP, RE AND EI

		Attitude
PLKP	Pearson Correlation	.050
	Sig. (2-tailed)	.454
	N	228
RE	Pearson Correlation	-.035
	Sig. (2-tailed)	.599
	N	228
EI	Pearson Correlation	.011
	Sig. (2-tailed)	.871
	N	228

1. PLKP and Attitude

a. Findings from Quantitative Data

As shown in Table 2, almost all the TMPs disagreed that transmitting their knowledge of traditional medicine would

lead to loss of their knowledge, unique value in the community and their power base. However, at $p=0.05$, Table 5 shows that there is no significant relationship between attitude of TMPs towards transmission and perceived loss of knowledge power. This relationship was

also investigated at the state level. In all the 6 states, the results of the PPMC show that a significant relationship does not exist between attitude of TMPs towards transmission of their knowledge of traditional medicine and PLKP.

b. Findings from Qualitative Data

Qualitative data collected show that loss of knowledge power is not a consideration in the transmission of their knowledge. Rather, they are keen on transmitting this knowledge while they are alive because they do not desire that the knowledge dies when they as the custodians die.

“I will not take it to heaven, when a person dies; he dies with his knowledge of traditional medicine” (Key informant, Male, Agbado Community).

“When a child knows your wealth, it will not die with you” (Key informant, Male, Iwetin Community).

“We transmit to others so that the knowledge does not die”. “We might think death will not come and it will come and sometimes it might not come. That is why we encourage those who are interested so that we transmit to them” (Key informant, Male, Olode Community).

2. RE and Attitude

a. Findings from Quantitative Data

Almost all the TMPs agreed that transmitting their knowledge is important to the enhancement of their reputation (Table 2). They believed that transmitting their knowledge earns them more respect, praise and recognition from others. However, the result of the PPMC shows that no significant relationship exists between attitude of TMPs towards transmission and reputation enhancement (Table 5). This trend was also observed in all the 6 states in South west Nigeria.

b. Findings from Qualitative Data

It was interesting to note that in all the 6 states, concern for their reputation was a strong factor in knowledge transmission by the TMPs. Apart from their concern on the preservation of traditional medical knowledge; they also worried about the preservation of their names. This is shown in some responses below:

“So that our names do not perish”. “Once a person believes that it must all come to an end someday”. (FGD participant, Female, Iwetin Community)

“If a person dies with his knowledge and did not transmit it to any child, the knowledge will die. But if he has transmitted it to his child, his child or another person’s child learning under him, the knowledge will continue to grow and the person’s name will not perish” (FGD participant, Male, Igbonla Community).

“If a person fails to reveal what he knows to others, not saying, ‘I have this knowledge’, when he dies the medicine too has died and people will curse him” (Key informant, Male, Butubutu Community).

3. EI and Attitude

a. Findings from Quantitative Data

As shown in Table 2, more than 60% of the TMPs agreed that they would receive monetary incentives for knowledge transmission, whereas about 60% reported being strongly motivated by monetary incentives. The results from PPMC analysis however did not show that a significant relationship exists between attitude of TMPs towards knowledge transmission and expected incentives (Table 5). This was also observed as the trend in each state.

b. Findings from Qualitative Data

The findings showed that most TMPs in the region would receive money in exchange for knowledge transmitted. The few exceptions in the region were mostly the elderly ones. The receipt of monetary incentives in exchange for knowledge transmitted is not a bad practice in itself as elderly TMPs who acquired the knowledge from non-parents revealed that they also had to pay in kind before their teachers agreed to transmit the knowledge to them. It is only hoped that overtime, the practice of receiving monetary incentives for knowledge transmitted will not outweigh other valuable reasons for knowledge transmission in the region. Some of their responses are shown below:

“A person who comes to you that he wants to learn this work, we will teach him and he will know that this is what we will take from you o (Long emphasis)” (FGD participant, Male, So-so Community).

“It is difficult not to collect money from those who want to learn our work, especially if you are not my blood. It is not just possible” (FGD participant, Female, Olode Community)

Findings from quantitative data have shown that no significant relationship exists between attitude of TMPs towards transmission of their knowledge and the motivational factors. However, findings from qualitative

data revealed that the TMPs are concerned about their reputation; they do not fear losing their knowledge and they receive money for knowledge transmitted. This findings support those from other studies on knowledge sharing such as Chennamaneni (2006) , Kankanhalli *et al.* (2005), Lin *et al.* (2016) and Wasko and Faraj (2000), and this suggests that traditional medical practitioners in the study area are likely to transmit all their knowledge because of their desire to build their reputation and impress others. Jin *et al.* (2009) investigated users' continuance intention to answer questions in online Q & A communities in China and reported that while satisfaction was a key variable determining users' intention to continue answering questions, reputation enhancement was one of the primary antecedents of satisfaction. In a later study, Abzari *et al.* (2011) investigated knowledge sharing among 240 employees of an agricultural bank in Fars State Iran. The study showed that a higher level of perceived reputation enhancement contributed to a positive attitude of employees towards knowledge sharing. Lin *et al.* (2016) also reported that reputation was a significant factor influencing knowledge sharing among 164 physicians on web medical forums.

Contrary to previous studies on knowledge sharing (Chennamaneni, 2006; Gray, 2001) where a negative effect of PLKP on attitude towards knowledge sharing was reported, traditional medical practitioners in the study area generally disagreed that transmitting their knowledge reduces their hold on knowledge about traditional medicine. They believed that it is more prestigious when they transmit their knowledge. This finding also contradicts a similar study carried out by Jain *et al.* (2009) among the indigenes of Sariska and Siliserh regions of Alwar, India. The authors reported that traditional medical practitioners in those locations in India were hesitant in disclosing their knowledge. They believed that the knowledge was their source of recognition in the society; hence, they were not willing to share it. It might be said that such negative attitude towards transmission due to PLKP as reported by Jain *et al.* (2009) is only associated with metaphysical powers and not knowledge of herbs.

Some studies on knowledge sharing have reported that individuals are likely to engage in knowledge sharing when they expect to receive economic benefits (Ba *et al.*, 2001; Davenport and Prusak, 1998; Nguyen *et al.*, 2019), whereas others have highlighted the insignificance of such incentives (Chennamaneni, 2006; Lombardi *et al.*, 2019). This study tends to support the former school of thought as focus group discussions held with traditional medical practitioners in all the six states confirmed willingness to transmit knowledge after receiving monetary incentives specifically for

apprentices who are not biologically related to the TMPs. A most probable reason for this is that the TMPs believe that transmitting their knowledge should prove worthwhile for them. This probable reason has been acknowledged in previous studies on knowledge sharing (Chang and Chuang, 2011; Nguyen *et al.*, 2019).

IV. CONCLUSION AND RECOMMENDATION

The role of traditional medicine in Nigeria's health systems especially in rural communities demands that an active interest is required in ensuring its transmission. Hence, this paper presents findings based on a post-positivist enquiry into motivational factors influencing the attitude of TMPs towards knowledge transmission. The success of transmission of TMK has been shown to be significantly related to attitude of traditional medical practitioners. The desire for enhanced reputation and knowledge preservation were also revealed to be contributory to positive attitude of the TMPs towards transmission of TMK. The paper also used mixed method approach which suggests that a positivist approach to a study among TMPs in rural communities might need to be complemented by the qualitative approaches as these acknowledge subjectivity when carrying out research of this nature. It takes into consideration peoples' opinions and feelings.

Traditional medical practitioners are crucial to primary health care delivery in Nigeria especially among the rural dwellers in view of inadequate orthodox medical facilities in these areas. The fact remains that adequate and efficient orthodox medical facility as substitute for traditional medical practitioners in these areas will remain an unrealistic expectation for some decades to come. Hence, the preservation of traditional medicine in these communities is key to the provision of their primary health needs. This study recommends that more studies be conducted in other parts of the country and ethnographic approach to such studies will surely go a long way in providing a more holistic picture of issues related to knowledge transmission among traditional medical practitioners.

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