

# UNDERSTANDING THE BARRIERS TO ADOPTION OF ONLINE COMMUNITIES OF PRACTICE (OCOP) FOR MINIMIZING PROFESSIONAL ISOLATION AMONG MIDWIVES IN KATSINA STATE PUBLIC HOSPITALS

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## **Abstract**

*The study investigated the barriers to adoption of online communities of practice (OCOP) for minimizing professional isolation among midwives in Katsina State public hospitals. To achieve this purpose objective was formulated with respect to determining the barriers to adoption of OCOP for minimizing Professional Isolation among Midwives in Katsina State. The study employed cross sectional survey. The population of this study comprises of Midwives practicing in public Hospitals in Katsina State. The total number of Hospitals is 20. A Stratified simple random sampling technique was employed to select 180 respondents. Questionnaire was used as the instrument for data collection. The data collected for the study was analyzed using descriptive statistics. The findings of the study revealed that, lack of awareness, training and upgrading of IT skills, Workplace acceptance and support, Lack of internet access, Lack of active participation of members, Lack of time, slow internet speed and lack of trust are the barriers to adoption of online communities of practice (OCOP) for minimizing professional isolation among midwives in Katsina State public hospitals. In view of the above a number of recommendations were made among which are: the early adopters of OCOP should encourage their colleagues to embrace the use of OCOP by enlightening them about the benefits of OCOP for minimizing Professional Isolation through Workshops/training sessions, meetings, storytelling during lunch. The Management should also use consultancy services to mount regular training programs like seminars and workshops to help the Midwives acquire skills in the use of OCOP and upgrade the skills of those who had already acquired such skills. More so, the consultancy service should engage in advocacy program on the availability of OCOP for minimizing Professional Isolation.*

**Keywords:** Adoption, Katsina State, Midwives, Online Communities of Practice, Professional Isolation and Public Hospitals

## **Introduction**

Man is a social animal, he needs someone to interact, discuss, gossip, exchange views, ideas knowledge, learn and mentor others particularly among midwives working in hospitals of Katsina State. Professional isolation refers to a state when a professional individual experiences a sense of separation from his/her professional peers, while lacking mentoring and opportunities for professional interaction, collaboration and development (Mahlomola, Petra, and Tricia 2021). Professional Isolation is a multidimensional concept which may either be geographic, social, and/or ideological. Aoki, Yamamoto, and Ikenoue (2018) attest that professional isolation

originates from physical separation that is, when individual professionals are not co-located, thus leading to limited coordination and collaboration. Mahlomola, et.al (2021) describes professional isolation as professional loneliness. The negative effects of professional isolation in low resource environments have chronically contributed to the quality of health service delivery and compromised quality of life for health care workers. Professional isolation in conjunction with insufficient exposure to specialist areas of practice has the ability to create a culture of uncertainty particularly among health professionals and in some instances may lead to lack of confidence which is hazardous to patients' health.

With the proliferation of Information and Communication Technologies (ICTs), the use of Online Communities of Practice (OCoP) has increased considerably in many organizations in an attempt to connect professional from scattered geographic locations (Boh, 2014). Online Communities Practice (OCoP) has become increasingly popular with the growth of Web 2.0 technologies. Online Communities of Practice is a network of individuals who share a domain of interest about which they communicate online to share resources, experiences, problems, solutions, tools, methodologies. Online Communities of practice (OCoP) are found to play a central role in fostering cooperation between time-and space-dispersed participants (Correia, Paulos, & Mesquita, (2010). Tang and Yang (2005) further suggests that OCoP is regarded as an informal means of enhancing the sharing of knowledge across time and distance.

More so, an Online Communities of Practice allow practitioners to share resources, experiences, problems, solutions, tools, methodologies which consequently results in the improvement of the knowledge of each participant in the community and contributes to the development of the knowledge within the domain. Online Communities of Practice facilitates the sharing of experience by enabling people with common interests and objectives to engage in discussion, debate, and reflection through the web. An important OCoP characteristic is asynchronous communication, i.e., it is not limited to having all parts interacting at the same time. With this, using the Internet, a disperse group of professionals can talk asynchronously according to their convenience (Cesar, Bulterman, Guimaraes, & Kegal 2010). OCoP provide Midwives around the world access to the relevant information they need, at the time they need it, and in a venue in which they can immediately share local and international experience in order to overcome Professional Isolation and improve reproductive health programs. Online communities of practice (OCoP) are organized using online forums, mailing list, social media, and website/web portals.

However, the creation of OCoP may not guarantee that users are willing to adopt it. The success of any OCoP depends primarily on whether the users are willing to adopt it (Gu and Jarvenpaa 2003). Therefore, This paper primarily aim to have a better understanding of the Barriers that affect midwives practicing in rural areas to properly and adequately adopt OCoP for minimizing Professional Isolation. Better knowledge of such Barriers will help in gathering information that could be used in laying suitable measures to improve and enhance wider and proper adoption of OCoP. Previous researches indicate that for wider and proper adoption of new technology, it is vital to investigate the Barriers that affect user's intention to adopt and use a system (Ronald, 2010; Mohammed, Andargie, Meseret, & Girma 2013).

## **Statement of the Problem**

Globally, nurses and midwives provide over 80% of health care services (WHO, 2016). Too often, medical knowledge remains within the walls of academic and tertiary care centres in capitals and major cities, inaccessible to much of the world's population due to geographical distance and economic disparity (Struminger, Arora, Zalud-Cerrato, Lowrance, & Ellerbrock, 2017). This knowledge has to be shared among nurses and midwives if health care services provision is to be effective. Therefore, absence of knowledge sharing in our hospitals can lead to professional isolation, which is an important cause for Knowledge to Practice gap. The gap that exists between what is already known and what is done in practice (Lin and Hsieh, 2006; W.H.O., 2005) Bridging or minimizing professional isolation is achieved through sharing of relevant knowledge and scientific evidence-based practices regularly (Richey & O' Brien, 2011, W.H.O. 2005). Conventional or face-to-face forms of sharing knowledge regularly (such as lectures and workshops) can be expensive, time-consuming, and more challenging due to professional regional dispersions. Thus, OCoP is a viable alternative to live conversation and spread of best practices regularly, irrespective of different geographical locations and time differences. OCoP offer a unique low-cost way to work towards closing professional isolation by making the latest scientific evidence-based practice available to reproductive health professionals.

A preliminary investigation of five public rural hospitals in Katsina State conducted by the researcher showed that, despite the potentials of OCoP, Midwives in Katsina State are experiencing high level of professional isolation and knowledge to practice, the result of which can be seen in high occurrences of missing diagnosis, wrong treatment, an unacceptably high level of maternal mortality rate of 1,000/100,000 live births in Katsina state (W.H.O. 2005; Katsina State Ministry of Health, 2010). Previous researches indicate that for wider and proper adoption of new technology, it is vital to investigate the Barriers that affect user's intention to adopt and use a system (Ronald, 2010; Mohammed, Andargie, Meseret, & Girma 2013). Thus, the study to investigate and understand the Barriers to adoption Online Communities of Practice for closing minimizing Professional Isolation among Midwives in Katsina State.

## **Objective of the Study**

The study was design to achieve the following objective:

1. To expose the Barriers to adoption of OCoP for minimizing Professional Isolation among Midwives in public hospitals Katsina State.

## **Literature Review**

Barriers or simply obstacles of Online Communities of Practice adoption by Midwives are those aspects that deter Midwives to adequately adopt Online Communities of Practice for minimizing Professional Isolation. Without knowing such Barriers, one may face difficulties in formulating strategies towards improving Online Communities of Practice adoption. It is important to have a clear understanding of the challenges since it is by addressing them that better adoption of Online Communities of Practice for minimizing Professional Isolation may be achieved.

Researchers have revealed several challenges of Online Communities of Practice adoption. For instance, Barnett, Jones, Bennet, Iverson, Bonney (2013) noted that preserving patient privacy is one of the major barriers in Online Communities of Practice adoption in

healthcare. A study by Househ (2012) shows that lack of support and the need for regulation and appropriate policy are the obstacles of adoption of Online Communities of Practice for minimizing Professional Isolation. Also a study by usher (2012) revealed three obstacles of Online Communities of Practice adoption: lack of time, Information anarchy, and the potential risk of developing addictive behaviors. Kankanhalli and Kwok-Kee (2005) revealed Loss of Knowledge Power, Codification Effort, and Fear of losing face as challenges. Also Pahani, Watson, and Partridge (2014) highlighted the challenges encountered by physicians while adopting Online Communities of Practice as follows: Maintaining confidentiality, Lack of active participation, Lack of trust, Finding time, Workplace acceptance and support, Loss of Knowledge Power, Codification Effort, Fear of losing face, Technology Awareness.

From the reviewed literature, there is evidence of surveys that investigated the barriers to adoption of online communities of practice. Most of the reviewed studies investigated physicians, nurses, and pharmacists, none of the studies investigated Midwives' adoption of online communities of practice.

However, noted from the review is that majority of the studies were skewed to developed countries. None of the studies have a wider geographic coverage; they lack representation of respondents from developing countries. Very few studies of online Communities of Practice were done in Africa and particularly in healthcare organizations in Nigeria.

It is generally acknowledge that health professionals from different communities are likely to have different attitude regarding online communities of practice (Comba and Vignocchi 2005). Thus, the fact that most of the reviewed studies were skewed to developed countries implies that they may not necessarily reflect the existing situation of local conditions in different developing countries. Therefore, there was a need to conduct specific studies in order to understand the peculiar differences across different environments so as to come up with proper strategies for an effective adoption of Online Communities of Practice in such environments. The investigation was thus designed to investigate the barriers to adoption of Online Communities of Practice for knowledge sharing among Midwives in Katsina state

## **Methodology**

The study used quantitative methodology and cross –sectional survey research design adopted. The population of this study comprises of Midwives practicing in Hospitals under Katsina State Health Service Management Board. The total numbers of Hospitals are 20. A Stratified sampling technique was employed in this study. The population of the hospitals in public hospitals in Katsina State was divided into two (3) stratum on the basis of senatorial zones. A simple random sampling was employed to randomly sample 40% of the hospitals from each stratum. Two (2) hospitals were randomly selected from strata one (1) and strata two (2), and four (4) hospitals were randomly selected from strata three (3). The total numbers of Midwives under the hospitals that were randomly selected are 180. Questionnaire was used as the research instrument for data collection in this study. The data collected for the study was analyzed using descriptive statistics.

## Findings and Discussion

This section provides the finding of the study followed by discussions in line with the objectives of the study.

### Response Rate

The researcher distributed a total of 180 copies of questionnaires to the respondents, out of which 113 (62.7) copies were duly completed, returned and found useful for the study. This response rate was achieved do to the fact that the researcher give additional two weeks in some hospital do to their busy schedules.

**Table 1: Response Rate of the Respondents**

Stratum	Hospital	Questionnaire Distributed	Questionnaire Returned	Percentage
Strata 1	General Hospital Kankia	14	08	7.1
	General Hospital Mani	04	04	3.5
Strata 2	General Hospital Malunfashi	16	11	9.7
	Malunfashi Maternity and Children Hospital	21	14	12.4
Strata 3	General Hospital Rimi	07	05	4.4
	General Hospital Batsari	10	08	7.1
	General Hospital Kurfi	05	04	3.5
	TuraiYar'adua Maternity and Children Hospital Katsina	103	59	52.2
<b>Total</b>	08	180	113	99.9

Table 1 revealed that TuraiYar'adua Maternity & children hospitals Katsina has the highest response rate of 59 (52.2%); while General hospital Mani and General hospital Kurfi has the least response rate 04 (3.5%) each. The variations in the response rate were due to the fact that the population size of the Midwives practicing in these hospitals is not of equal proportion; this is because some hospitals in urban areas are bigger in size and in number of clients compared to rural hospitals. Therefore, it is clear from the table that TuraiYar'aduaMaternity & children hospitals Katsina have more population than other hospitals.

### Barriers to Adoption of Online Communities of Practice for minimizing Professional Isolation among Midwives in Katsina State

One of the objectives of this research is to identify the Barriers to Adoption of Online Communities of Practice for minimizing Professional Isolation among Midwives in Katsina State. The respondents were asked to indicate the Barriers to Adoption of Online Communities of Practice for minimizing Professional Isolation as outline in the table below:

**Table 2: Barriers to Adoption of Online Communities of Practice for minimizing Professional Midwives in Katsina State Hospitals**

Challenges	G.H. Kankia	G.H. Mani	G.H. M/fashi	G.H. Rimi	G.H. Batsari	G.H. Kurfi	M/fashi M. H.	T. Y/dua M.H.K	Mean	Std
Fear of not Maintaining of patient privacy/ confidentiality	1	0	2	0	1	0	3	4	1.38	1.41
Lack of active participation of members	3	2	4	1	5	2	6	13	4.50	3.57
Lack of trust	4	1	2	2	4	2	6	8	3.63	2.23
Lack of time	6	1	2	1	4	1	7	9	3.88	2.93
Workplace acceptance and support	6	2	3	2	6	2	8	13	5.25	3.63
Difficulties in joining OCoP	4	1	4	1	3	1	3	4	2.63	1.32
Lack of internet access	5	2	3	2	7	2	7	14	5.25	3.90
Slow internet speed	5	1	2	1	4	1	6	10	3.75	2.90
Loss of knowledge power	0	0	2	0	3	0	2	3	1.25	1.30
Fear of losing face	0	0	1	2	3	1	2	3	1.50	1.12
Lack of Technology Awareness	7	3	6	3	7	2	10	36	9.25	10.41
Lack of Training & upgrading of IT skills	5	2	4	2	3	1	9	27	6.63	8.10

**KEY: G.H. = General Hospital, M/fashi= Malunfashi, M.H. = Maternity Hospital, T.Ydua= TuraiYaradua.**

Table 2 shows the Barriers to Adoption of Online Communities of Practice for minimizing Professional Isolation among Midwives in Katsina State. The result indicates that majority of the items listed were considered as Barriers to adoption of Online Communities of Practice. Consideration from the table 2 shows that lack of awareness has the highest mean of 9.25, followed by lack of training and upgrading of IT skills with 6.63, Workplace acceptance and support and Lack of internet access with a mean score of 5.25 respectively. It was also observed that Lack of active participation of members has a mean of 4.50; Lack of time has a mean score of 3.88, slow internet speed with a mean score of 3.75, lack of trust with 3.63.

## **Conclusion**

Health practitioners play an important part in our everyday lives. Professionals obtain health information from their peers and disseminate this information to enhance best practices and informed health decisions. From the findings of this study, lack of awareness is the major antecedent affecting adoption of OCoP among Midwives in Katsina State, and This is largely attributed to the fact that no management acceptance and support and formal awareness campaign program is in place to sensitize the Midwives on the benefit of adopting Online Communities of Practice Platforms for minimizing Professional Isolation. The low-level awareness and lack of management acceptance and support were mainly responsible for non-adoption of Online Communities of Practice Platforms for minimizing Professional Isolation among Midwives in Katsina State.

## **Recommendations**

Based on the findings arising from the study the following recommendations were made:

Ministry of Health and Health Workers Union of Katsina State should design of awareness campaign programs, use of consultancy services to mount training, and creation of local platforms across all the Hospitals that will sensitize the Midwives in Katsina State Hospitals. The early adopters of OCoP in Katsina State hospitals should encourage their colleagues to embrace the use of OCoP by enlightening them about the benefits of Online Communities of Communities for minimizing Professional Isolation through Workshops/training sessions, meetings, storytelling during lunch. The Ministry of Health Katsina State should consider preparing appropriate policies to support the development and adoption of the OCoP. Policies that support recognition of knowledge using OCoP can play a major role in encouraging the Midwives to share their experiences and skills through OCoP. For example, A midwife who adopt and shares relevant knowledge in an OCoP should deserve a point for the award of staff of the month or year; also, The Management should look into the possibility of collaborating with other health agencies to require Midwives to disseminate or share their experiences and skills in an OCoP as a way of accounting for the award for their international seminars, conferences, and research grants. And the management of Hospitals in Katsina State should use consultancy services to mount regular training programs like seminars and workshops to help the Midwives acquire skills in the use of OCoP and upgrade the skills of those who had already acquired such skills. More so, the consultancy service should engage in advocacy program on the availability of OCoP for minimizing Professional Isolation.

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