Original Research



Experiences of health care workers' on interprofessional collaborative practice at Mzuzu Central and Ntcheu District hospitals

Immaculate C. Chamangwana^{1,4}, Diana Jere², Abigail Kazembe³

1. Zomba Mental Hospital, Malawi Ministry of Health

2. Faculty of Midwifery, Neonatal and Reproductive Health Studies, Kamuzu College of Nursing, University of Malawi/Kamuzu University of Health Sciences

3. Faculty of Community Health (Studies), Kamuzu College of Nursing, University of Malawi /Kamuzu University of Health Sciences 4. Faculty of Applied Health Studies, Kamuzu College of Nursing, University of Malawi/Kamuzu University of Health Sciences

Correspondance: Immaculate C. Chamangwana; (chamangwana@gmail.com)

Abstract

Background

Interprofessional collaborative practice (ICP) is a new approach to delivery of health care. It is the practice which happens when healthcare providers work together with different professionals such as nurse/midwives, medical officers towards a common goal to improve patient outcomes. There is no evidence on healthcare workers' experiences on ICP in Malawi and a study on healthcare workers experiences would provide insight towards ICP. The objective of this study was to describe healthcare workers' experiences on ICP in model wards .

Methods

We conducted a qualitative exploratory descriptive study at Mzuzu Central and Ntcheu District Hospitals. We purposely selected nurses, clinical officers and medical doctors out of 25 sampled healthcare workers working in model wards. Data were collected through in-depth interviews using a semi-structured interview guide. Hospital authorities provided permission to conduct the study in their sites. Informed consent was obtained from participants before interviews. The study was approved by College of Medicine Research Committee (COMREC). Content analysis was utilized to analyse data.

Results

Four key themes emerged describing healthcare workers experiences on ICP:Increased management/ leadership support in terms of resources and structures, good communication among staff, learning together as group of qualified healthcare workers and students and increased teamwork.

Conclusion

This study highlights healthcare workers' experiences on ICP: management support, communication, learning together of healthcare workers and teamwork. Findings can be used to inform management and practice for the development and implementation of ICP in service delivery.

Key words: interprofessional collaborative practice, management support, teamwork, communication, model wards.

Introduction

Interprofessional collaborative practice (ICP) is a new approach to delivery of health care which plays an important role in meeting the global health workforce crisis through working together of different professionals^{1,2}. ICP as a practice, facilitates communication and decision making for different professionals working together towards a common goal to provide quality care and improve patient outcomes. Many policy makers in many countries are also increasingly recognizing the importance of implementing ICP at all levels in order to meet the health needs of the populations^{1,3,4}. ICP is gaining greater attention now because the world recognizes the importance of each profession's contribution towards patient care and effective utilization of the scarce resources. The World Health Organization developed a framework of Action on Interprofessional Education and Collaborative Practice (IECP) to provide strategies for implementation of ICP in order to improve efficiency of care^{1,2}. The Framework highlighted institutional support mechanisms which shape the way a team of people can work collaboratively. Working culture mechanisms provide opportunities for shared decision making and routine team meetings and environmental mechanisms significantly enhance or detract ICP in an interprofessional health facility. These mechanisms have been utilized in this study to guide and describe healthcare workers experiences on ICP in model wards.

Evidence has shown that there are limited programs that use and promote ICP approach in Malawi and beyond¹. Health professionals continue working in silos with minimal use of team approach to solve patients' problems⁵. Experiences of healthcare professionals and students on ICP in general practice and training wards have been well documented in developed countries like Australia, Canada, Brazil, United States of America, India and South Africa⁶. However, competent interprofessional teams, strong leadership, education/training, coordination and communication factors have been reported to facilitate implementation of ICP resulting into higher quality patient care and better patient outcomes^{1,7,8,9}.

While much research on healthcare workers' experiences on ICP has been conducted in developed countries, there is no evidence on healthcare workers' experiences on ICP in Malawi.Understanding healthcare workers' experiences

Data collection

on ICP is important in order to direct the formulation of strategies and interventions for the development and implementation of ICP towards provision of quality of care in service delivery. Therefore, this study aimed at describing the healthcare workers' experiences on ICP in model wards in selected hospitals in Malawi which were developed to serve as centers of excellence in the implementation and delivery of quality services to patients with emphasis on ICP-

Methodology

Study design

The study utilized qualitative research approach with exploratory and descriptive design that allowed in- depth understanding of the perspectives of the nurses, doctors and clinical officers. It allowed the researchers to collect rich and detailed data from the participants working in the study sites¹⁰. Therefore, the doctors, nurses and clinical officers perspectives regarding healthcare workers experiences on ICP in model wards were described.

Study setting

The study was conducted at Mzuzu Central Hospital and Ntcheu District Hospital. Mzuzu Central Hospital is a tertiary referral hospital for specialized care for all district hospitals in the northern region with a bed capacity of 350. The hospital is responsible for professional training, research, specialized care and has various wards and departments such as medical, surgical, obstetrics and gynecology, laboratory services etc. On the other hand, Ntcheu District Hospital is a secondary level facility in Central region with bed capacity of 300. The hospital provides both inpatient and outpatient services, receives referral cases from all health centers and private health facilities within the district. It has various wards and departments such as medical, surgical, obstetrics and gynecology, laboratory services etc. The two hospitals were amongst the four hospitals where model wards were developed and were fundamental in understanding healthcare workers' experiences on ICP.

Sample size and sampling method

The study had 13 participants selected out of the 25 sampled healthcare workers who were at the time of the study working in model wards at Mzuzu Central and Ntcheu District hospitals. Purposive sampling was used to recruit participants who met the criteria for the inclusion criteria was being licensed to practice, working in the model wards for more than three months at the time of the study and consented to participate in the study. Healthcare workers who were not licensed, had less than three months of working in model wards , those on locum duties and those not willing to participate in the study were excluded.

Ethical considerations

The study was reviewed and approved by College of Medicine Research Committee (COMREC) with Certificate No. P.04/17/2109. Permission to conduct the study was obtained from Hospital Director of Mzuzu Central Hospital and the District Health Officer of Ntcheu District Hospital. Confidentiality and priacy was maintained by utilizing codes and not names of the participants. Informed consent was obtained from each participant after being provided with the study information and all ethical requirements for the study.

A researcher utilized a self-developed semi-structured interview guide to collect data from the healthcare workers in model wards who were eligible and consented to participate in the study.Before data collection, the researcher pre-tested the in-depth interview guide at Ntcheu District hospital at the model ward whose results are not part of this study. Pretesting assisted to assess clarity of some words and the content which helped to revise, adjust, amend and improve the guide accordingly. The interview guide was in English and based on WHO Framework for Action on Interprofessional Education and Collaborative Practice¹ which included demographic data, collaboration of healthcare workers in the wards and its importance in delivery of services, experiences of working in model wards .

Thirteen (13) in-depth interviews were conducted based on the availability of eligible participants in the study sites and sample criteria which states that samples in qualitative studies are usually small but can go up to 50¹¹. In this study saturation was reached at participant number 12 but all the 13 participants were interviewed. The interviews were conducted by the researcher herself as she was capable and reflexibility was observed throughout data collection to avoid researcher bias which could have affected the study findings.

Data analysis

All individual in-depth interview data were analyzed using content analysis. Analysis used an inductive approach and occurred concurrently with data collection. The approach was recommended as appropriate since ICP is a new approach in service delivery in Malawi, and no research has been conducted hence there is limited literature and knowledge about the phenomenon¹². Data analysis steps followed firstly preparation which included transcription of interviews to define unit of analysis by repeatedly and immersing into the data to get meaning out of it. Secondly, organization of data through opening codes, creating categories and abstraction to describe all aspects of the content; grouping categories formulating new categories, organizing/linking and categories into categories and subcategories pertaining to the phenomenon and lastly reporting the outcome of data analysis.

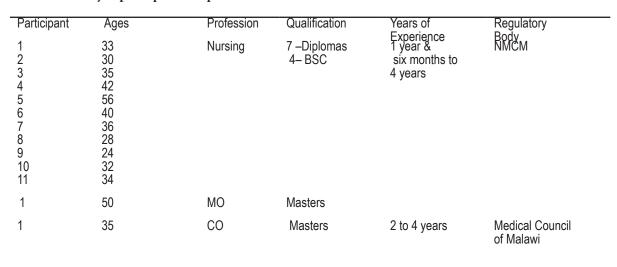
Trustworthiness

Trustworthiness of the research findings was established and achieved through credibility, dependability, confirmability, transferability and authenticity11. Credibility was achieved through prolonged engagement with the study participants during in - depth interviews until saturation was reached and direct quotations, rich and thick descriptions of the collected data were utilized to reflect participants' experiences on ICP. Dependability of data was enhanced by specifying how participants were selected and all participants' were interviewed using the same interview guide. Confirmability was achieved through provision of the audit trail while transferability was achieved through thick and rich descriptions of the study context which was supported with relevant examples and similar findings from other research studies. Quotes from the participants and field notes were provided for authenticity of the study.

Results

Sample Characteristics

The 13 interviewed participants included six participants Postgraduate Supplementary Issue Table 1: Summary of participants' sample characteristics



from Mzuzu Central Hospital model ward in Mzuzu and seven from Ntcheu District Hospital model ward in Ntcheu. Of the 13 participants, 11 were Nurse/ Midwives, 1 Medical Officer and 1 Clinical Officer who worked together in the provision of care. All the thirteen (13) participants were practicing healthcare workers who were licensed by the respective regulatory bodies. All the participants had been working in their current wards for more than three months to five years.

Themes emerging from the data

The following themes emerged from data analysis that described the healthcare workers experiences on ICP in service delivery: Increased management support, good communication, learning together as group of qualified healthcare workers and students and increased teamwork.

Management support.

Participants perceived that operational standards, guidelines, protocols, procedure manuals and all essential supplies/ equipment and other resources supported provision of quality care to patients. They stated that availability of resources provided enabling environment for meeting patients' daily needs and quality service delivery.

"Of course management at the hospital makes sure that the resources and protocols are available for us to work properly. Without resources we cannot provide comprehensive care, so the hospital management makes sure that the resources are available."

(Participant # MCM1, N/M).

"Okay, being in the model ward, I have a good experience because most of the time the resources are available. We have NEPI organization which donated some resources and weighing scale. So, the resources are always available." (Participant # NUM 1, N/M).

Communication

Participants reported that with good communication, coordination of different patient information through ward rounds, case presentations, patient reviews, whatssap groups, telephones, one to one and other patients' activities/ interventions was very easy. Participants reported that improved communication promoted mutual respect, recognition of each one's contribution in service delivery and created enabling working environment for providers.

"Ward rounds, ward meetings and case presentations provide a forum for communication and discussions on the patient care issues." (Participant # NUM2 MO).

Learning together of healthcare workers

Some participants indicated the importance of having updates on professional skills and knowledge through various forums such as refresher courses, in-services and even learning from other professionals such as nurses, doctors, clinical officers and students. Participants said learning together was important because it assisted to appreciate the contributions of others as regards to their roles and responsibilities, improved their professional practice, instilled confidence, enhanced timely referral of patients to each other, brought about positive management and care of patients with different clinical conditions.

Participants reported that ward rounds and case presentations were used as teaching and education forums for all staff and students where a lot of learning took place and that students had the opportunity of working with different professionals in practice.

"What I know is that here in model ward students are supposed to learn more and everything is supposed to be here like equipment for students to learn." (Participant # MCM1, N/M).

"Currently we do have one or two case presentations every week conducted in the morning and all nurses, clinical officers, students and doctors are there learning from various healthcare workers' that facilitate comprehensive learning on the part of students and staff." (Participant # NUM 6, N/M).

Teamwork

Participants stated that teamwork promoted mutual understanding of each other's roles, shared ideas, cooperated and respectd each other's contributions. Through teamwork, most of the things are conducted as planned in the wards and a lot of learning took place. Morning reports and handovers are some of the forums conducted in the hospitals where discussions occur surrounding issues affecting patients.

"Doctors, clinical officers, nurses and students work together in the wards, share resources for management of patients and also discuss patients' cases or conditions during handovers." (Participant # MCM 2, CO).

Most participants reported that the most frequently

Malawi Medical Journal 33; June 2021

involved professionals they work with are doctors, clinical officers, and nurses. However, participants reported that at times they worked with other healthcare workers from other departments such as Laboratory, X-ray, orthopedic, administration depending on the need and problem of the patients and refer patients to each other as regards to their roles/ responsibilities.

"It is easy; I personally feel one is relieved when you meet a condition which you cannot manage on your own. As you work with others you are able to assist each other and the patient according to the diagnosis." (Participant MCM4, N/M).

Discussion

The study suggests that increases management / leadership support, good communication, learning together of a group of qualified healthcare workers and students and increased teamwork are healthcare workers' experiences on ICP for improved service delivery. Management support is crucial for the development and delivery of ICP. Management and leadership support encourages collaborative practice through provision of institutional, working and environmental support mechanisms such as policies, protocols, space and other resources. Institutional support mechanisms assist shape the way a team of people can work collaboratively¹. Staff working together towards provision of quality of care and better patient outcomes need clear governance model, structured protocols, shared operating procedures and resources as was reported by the participants in this study. These provisions encourage working together of professionals as a team in service delivery. Working culture and environmental mechanisms enhances effective collaborative practices where opportunities for shared decision making and routine team meetings such as morning reports, ward rounds enable healthcare make decisions on common goals towards delivery of quality care and improve patient outcomes.

These study findings agree with the findings of other studies which demonstrated that ICP benefits from management /leadership support and the availability of protocols, standards and other resources for improved care9,12,13. Having well-structured information systems and processes, effective communication strategies, policies and regular dialogue among team members play an important role in establishing a good working culture which contributes to effective delivery of services¹. The availability of resources, protocols, guidelines, good infrastructure and some tools in the model wards demonstrated management support for ICP. The support facilitated communication and effective decision making of care providers towards delivery of quality care and improved patient outcomes as the ultimate goal of ICP. Implementation of ICP requires management and strong leadership who are willing to initiate change and motivate healthcare workers to take up collaborative practice for improved service delivery^{13,14}.

On communication, utilization of forums such as wards meetings and other communication channels such as telephone and one to one communication encourages open communication and proper functioning of the professionals in the care process where professionals understand each other in responsive and responsible manner. The inclusion of different groups of professionals in this study also befits the requirement of ICP which supported teamwork, communication, coordination, collaboration and facilitated appreciation of each other's roles and responsibilities towards patient care in service delivery. Collaborative practice according to this study, is effective when there opportunities for shared decision making and routine team meetings where healthcare workers agree on common goals towards patient management for quality care and improved patient outcomes. Similary, previous studies argued that effective communication and regular dialogue among team members encourages a good working culture for effective development and implementation of ICP¹.

Model wards provided enabling environment for staff and patients as a result coordination of activities and communication was made easier which influenced delivery of care. The orientation to the concept of ICP healthcare received attributed to the positive insight and knowledge of the practice which promoted teamwork, sharing of experiences in management of patients and effective communication hence improved collaboration among healthcare workers. Good communication experienced in these wards as reported by study participants encouraged discussions of patient issues among care providers and referral to each other for better management of patients. The findings are comparable with previous studies which states that communication is key to quality teams as it creates a culture that enables continuous learning within the practice towards better and more efficient care⁹. Quality care is enhanced by effective communication among providers while poor communication negatively affects collaboration and teamwork^{15,16,17,18,19}.

Case presentations, ward rounds and refresher programs are some of the forums used as teaching and education avenues where learning and sharing of ideas takes place. Providers and students have the opportunity of working with different professions and appreciate the different roles and responsibilities of each other as was reported in this study which is very important in ICP. Previous studies support these findings and concluded that learning together of qualified healthcare workers and students facilitated ICP^{9,15}. Model wards were developed as teaching units for staff, students and were supported with resources which facilitated the learning, teaching of staff and students. Previous studies reported that utilization of training wards like model wards enable students to utilize the opportunities of working together with different professionals to develop their own professional roles and learn about other professions^{6,9}. highly Furthermore, institutions with competent interprofessional teams like training wards and model wards result in better coordinated, higher quality patient care and better patient outcomes^{7,8}.

Working together of different professionals in this study was an experience that healthcare workers narrated to have contributed to delivery of improved services in model wards which were well supported in terms of resources. ICP encourages healthcare professionals to engage with each other as teams in the management of specific clinical situations as was highlighted in this study. On the positive side, the study has demonstrated that ICP efforts are happening in health settings like in model wards much as ICP is a new concept in service delivery in Malawi. Professionals work together in the management of patients with different clinical conditions and interact with each other in different routine meetings such as ward rounds towards provision of quality care and improved patient outcomes. Previous studies support these findings where teamwork assisted participants do References

to work collaboratively, learnt from each other on how to do certain things in the delivery of cost effective patient care, positive patient outcomes and enhancement of patient and professional satisfaction^{16,17}.

The levels of professional qualifications of the healthcare workers help the individuals to appreciate the limitations in terms of each one's scope of practice. Understanding one's individual skills, knowledge, roles and responsibilities together with those of other professionals supports effective teamwork, communication and makes it easy to refer patients to each other as was reported by participants in this study. Studies have reported that in collaborative practice, collaborating partners have to know each partners competency for easy collaboration^{14,16}.

Utilization of routine meetings such as morning reports and inclusion of other providers from other departments like laboratory assists to promote collaborative practices of health care workers and collective decision making towards improved patient care. Routine meetings are important structures for the exchange of information pertaining to patient care and effective coordination of patient care being provided. Lack of information amongst health care workers negatively affects collaboration and service delivery¹⁸. Teamwork as a core competence of ICP supports the working together of the professionals where professional diversity are encouraged as they share expertise towards provision of quality care^{6,13,14,17,19}.

The study utilized face to face interviews that might have posed some challenges on the part of participants to adequately provide the responses since the study area is new in service delivery. This study included nurses and clinicians in model wards only. Inclusion of the other healthcare workers mentioned in this study could have added more insight on the study area. Further study is recommended with the other professions mentioned in this study and healthcare workers from other wards as they were not part of this study for more insight on the study area.

Conclusion

In conclusion, ICP supports the working together of different professionals towards quality care delivery. However, ICP is relatively new in Malawi and has never been practiced in service delivery. We have used qualitative research method to capture healthcare workers experiences on ICP in model wards. Management support, communication, learning together of healthcare workers and teamwork were healthcare workers' experiences on ICP. The findings can be used to inform management and practice for formulation of strategies and interventions towards development and implementation of ICP to improve quality of care in service delivery.

Acknowledgement

We would like to appreciate the healthcare workers who voluntarily participated in this study, management of Mzuzu Central Hospital and Ntcheu District Hospital for granting us the permission to conduct the study in their institutions. The University of Malawi – College of Medicine, Malawi Medical Journal, Blantyre Institute for Community Outreach (BICO) for the grant and technical support throughout the manuscript writing retreat. The Nursing Education Partnership Initiative, (NEPI) through ICAP for providing financial support throughout the study period. 1. World Health Organization. Framework for action on interprofessional education and Collaborative practice. 2010. Geneva, Switzerland: World Health Organization.

2. World Health Organization .Interprofessional Collaborative Practice in Primary Health care: Nursing and Midwifery Perspectives, Six case studies. Human Resources for Health. 2013. 13 Geneva, Switzerland: World Health Organization.

3. Gardner A, Hiller JE, McInnes E, Schadewaldt, V, et al. Views and experiences of nurse practitioners and medical practitioners with collaborative practice in primary healthcare – an integrative review. BMC Family Practice. 2013; 14 (132) .

4. Mulvale G, Embrett M, Ravazi D, Shangoyegh D R, et al. Gearing up to improve interprofessional collaboration in primary care: a systematic review and conceptual framework. BMC Family Practice. 2016. 17(83).

5.National Advisory Council on Nurse Education and Practice (NACNEP). Incorporating Interprofessional Education and Practice into Nursing.Thirteenth Report to the Secretary of the Department of Health and Human Services and the United States Congress.2015.

6. Morphat J, Hood K, Cant R, Baulch J, Gilbee A, Sandry K, et al. Teacing teamwork: an evaluation of an interprofessional training ward placement for Healthcare students. Advances in Medical Education and Practice. 2014. 5: 197-204.

7. Hunt DA, Milani M F, Wilson S, et al. Dedicated Education Units: An Innovative Model for Clinical Education. American Nurse Today. 2015. 10 (5): 46-49.

8. Kenner CA, Mc Vey C, Pressler J L, Vessey J A et al. Interprofessional Dedicated Units: An Academic Practice Partnership. Nurse Educator. 2014. 39 (4): 153-154.

9. Mickan S, Hoffman S J, Nasmith L, et al. Collaborative Practice in a global health context: common themes from developed and developing countries. Journal of Interprofessional Care. 2010. 24 (5): 492-522.

10. Lewis J, Nicholls CM, Omston R, Ritchie J et al. Qualitative Research Practice: A guide for Social Science Students and Researchers. 2013. Washington D.C.: Sage.

11. Polit, D F, Beck C T et al. Nursing research: Generating and assessing evidence for nursing practice. 2012. Lippincott Williams & Wilkins.

12. Elo S, Kyngas H et al. The qualitative content analysis process. Journal of Advanced Nursing.2008. 62 (1): 107-115.

13. Fleming C, Tomasik J, et al. Lessons from the Field: Promising Interprofessional Collaboration Practices. 2017. White Paper, The Robert Wood Johnson Foundation.

14. Ryan B. A qualitative study of Medical Social Workers and Nurses Perceptions on Effective Interprofessional Collaboration. Master of social work Clinical Research Papers. 2012. paper 84.

15. Task Force on Collaborative Practice Collaboration in Practice: Implementing Team-Based care. Report of the American College of Obstetricians and Gynaecologists.Obstetrics and Gynaecology. 2016. 127(3): 612-617.

16. Bonney, A., Halcomb, E., McInnes, S. & Peter, K. An Integative review of facilitators and barriers influencing collaboration and teamwork between general practitioners and nurses working in general practice. Journal of Advanced Nursing.2015.71(9): 1973-1985.

17. Hean S, Smith S, et al. Interprofessional Collaboration When Working with Older People. Bournemouth University.

18. Busari J O, Duits A J, MOLI FM, et al. Understanding the impact of interprofessional collaboration on the quality of care: a case report from a small- scale resource limited health care environment. Journal of Multidisciplinary healthcare.2017. 10: 227-234. 19. Interprofessional Education Collaborative Expert Panel . Core Competencies for interprofessional collaborative practice: Report of an expert panel. Washington D.C. Interprofessional Education Collaborative. 2011. 1-47.