



IMPLEMENTATION OF HOME VISITS BY CADRES THROUGH MULTI-PARTY COLLABORATION IN THE TRANSFORMATION OF PRIMARY HEALTH SERVICES

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ABSTRACT

The transformation of primary health care services in Indonesia, which began in August 2023, emphasizes improving access, quality, and coverage of health services for all life cycles, including through home visits conducted by Posyandu cadres. However, the implementation of home visits often encounters obstacles, such as lack of knowledge of cadres and limited resources. This study evaluates good practices in implementing home visits by cadres through a multi-party collaboration scheme in the transformation of primary health care services in South Tapanuli. This study employed an action research design to evaluate the implementation of home visits by Posyandu cadres through multi-party collaboration in South Tapanuli. A total of 1,095 families (4,293 community members) across six villages were included in the study using total sampling, ensuring all families in the target villages participated. Data were collected by cadres during home visits using standard forms and included health indicators for pregnant women, postpartum mothers, infants, adolescents, adults, and the elderly. Collected data were entered into a system and analyzed using descriptive statistics to map coverage gaps and identify unmet health service needs. This study was conducted in six villages in South Tapanuli and covered 1,095 families with a total of 4,293 community members over a three-month period (June-August 2024). The results show a mapping of significant health problems in various population groups, such as missing services for pregnant women (incomplete antenatal care of 89.29%), postpartum mothers (not taking vitamin A of 16.67%), infants aged 0-6 months (not doing complete neonatal visits of 32.08%), infants aged 6-72 months (not immunized of 68.16%), adolescents (not doing non-communicable disease screening of 96.91%), and adult and elderly age groups not doing hypertension screening of 77.1% and not doing diabetes screening of 87.9%. This multi-party collaboration has proven effective in identifying and mapping health problems that need to be followed up to reduce the health burden in South Tapanuli.

Keywords: health transformation; home visits; missing service; multi-party collaboration; posyandu cadres

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INTRODUCTION

Efforts to improve accessibility, coverage, and quality of primary health services continue to be the focus of the Ministry of Health of the Republic of Indonesia (Kemenkes RI) as a step to achieve optimal public health targets throughout the region, including in remote areas such as South Tapanuli. As part of the transformation of primary health services, in August 2023, the Ministry of Health of the Republic of Indonesia issued Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/2015/2023 concerning Technical Instructions for Integration of Primary Health Services which serves as a guide to integrating primary health

services with the aim of ensuring more comprehensive health services for the entire life cycle (Kementerian Kesehatan RI, 2023; Kementrian Kesehatan RI, 2023).

In the era of primary health service transformation, Posyandu now functions not only as a center for community health services, but also as the vanguard in expanding access and improving the quality of health services for all levels of society (Kementerian Kesehatan RI, 2023). As part of the Primary Health Service Integration (ILP) program, the role of Posyandu has evolved from merely organizing routine activities, such as immunization and weighing toddlers, to implementing home visits to ensure continuity of health services and direct monitoring of family health conditions (Damayanti et al., 2022). This approach is implemented within the ILP framework initiated by the Ministry of Health, involving collaboration between Posyandu, Puskesmas, and other health facilities to form a more integrated and comprehensive health service system with a life cycle-based approach (Santoso et al., 2023).

As part of the primary health transformation program, home visits conducted by Posyandu cadres play an important role in supporting the integration of primary services. Through home visits, Posyandu cadres can directly monitor the health conditions of the community, conduct early detection of health problems, provide education, and refer residents to health facilities if needed (Damayanti et al., 2022; Santoso et al., 2023). Through this activity, it is hoped that the accessibility of health services for people in need can be increased, and there will be an increase in prevention and early detection of various health problems, such as unmet antenatal care needs, low immunization coverage, and inadequate screening for non-communicable diseases (Damayanti et al., 2022; Wicaksono & Suryatmojo, 2022). The implementation of home visits by Posyandu cadres is an important step in efforts to bring health services closer to the community through a family and community-based approach. In this context, Posyandu cadres not only play a role as providers of health information, but also as direct implementers who help improve health monitoring and support at the household level (Kementerian Kesehatan Republik Indonesia, 2023; Kementrian Kesehatan RI, 2023).

The success of the transformation of primary health services through this home visit program requires multi-party collaboration that includes health services, health workers and medical personnel, the community, and the important role of the private sector. Private sector participation provides support in the form of funding, provision of medical equipment, to empowerment programs that strengthen the skills of posyandu cadres (Bennett et al., 2018). For example, the private sector through corporate social responsibility (CSR) programs often contributes in the form of providing logistical support and assistance in implementing empowerment or health programs that support cadres in carrying out their duties in the field (Hartini et al., 2023; Suryati & Marlina, 2021). The role of the private sector in this collaboration complements the support from community leaders, local governments, and health offices in strengthening health networks at the local level. This collaboration allows Posyandu cadres to not only focus on preventive and promotive services, but also play a role in expanding access to more comprehensive health amidst government budget constraints. Support involving cross-sectors helps create a strong network, so that home visits by Posyandu cadres can be more effective in addressing health challenges in the community and meeting dynamic health needs (Budianto & Wulandari, 2021; Hartini et al., 2023; Suryati & Marlina, 2021).

Although the transformation of primary health care services has become a national agenda, implementation in the field still faces various challenges, especially in ensuring the continuity of health services for communities in areas with limited access. Home visits by Posyandu cadres are one strategy that is expected to improve family and community-based health monitoring, but its effectiveness is highly dependent on coordination and support from various parties. Collaboration between the government, health workers, the community, and the private sector is a key factor in

strengthening an integrated primary health care system. In this context, a deeper understanding of the dynamics of multi-party collaboration and the factors that influence the successful implementation of home visits is needed. A study of this cooperation mechanism can provide insight into optimizing program implementation strategies, so that it can improve the accessibility and quality of primary health care services in a sustainable manner. This study evaluates good practices in implementing home visits by cadres through a multi-party collaboration scheme in the transformation of primary health services in South Tapanuli. This study evaluates good practices in implementing home visits by cadres through a multi-party collaboration scheme in the transformation of primary health care services in South Tapanuli.

METHOD

This study used an action research method with the aim of evaluating the practice of implementing home visits by cadres through multi-party collaboration in supporting the transformation of primary health services in South Tapanuli. The action research method was chosen because this approach allows research to be carried out in a collaborative framework that directly involves stakeholders and research participants to identify and address real problems in the field (Hartini et al., 2023). Each stage is designed to increase stakeholder participation, including posyandu cadres and health workers, in the process of identifying problems, implementing home visits, and evaluating the results of home visit activities in the context of primary health service transformation (Budianto & Wulandari, 2021; Hartini et al., 2023). This study was conducted in South Tapanuli Regency, North Sumatra with the study population being all families in six villages in South Tapanuli who were the targets of the home visit program by Posyandu cadres. The total population recorded in this study was 1,095 families, with a total of 4,293 community members. The study sample was determined using the total sampling method, where all families within the scope of the villages studied participated in home visit activities by cadres. This approach was taken to ensure that all families received comprehensive services and evaluations (Damayanti et al., 2022; Wicaksono & Suryatmojo, 2022). Data were collected through standard forms used by Posyandu cadres when conducting home visits. Each data was then entered into a system that was analyzed using statistical software to map the main health problems in the target population (Damayanti et al., 2022; Santoso et al., 2023). This research was conducted through several stages, namely:

1. Basic Needs Survey

Researchers conduct initial observations and collect data through various methods such as interviews and focus group discussions (FGD). The main objective of this stage is to gain an in-depth understanding of the existing problems, identify the needs and expectations of relevant stakeholders, and determine priorities that need to be addressed immediately (JW Creswell, 2018; Krueger & Casey, 2015)

2. Audience and Advocacy with Stakeholders

This stage involves communication and negotiation with relevant parties such as local governments, community groups, academics and the private sector. The goal is to raise awareness and gain support and commitment from stakeholders in implementing the solutions identified in the previous stage (Huxham & Vangen, 2013; JM Bryson, 2018; Lynam & Box, 2019)

3. Training and Mentoring for Cadres and Health Workers

The types of training conducted include Training of Trainers for health workers related to the implementation of 25 cadre skills training and home visits and 25 cadre skills training and home visits for cadres of the integrated health post fostered by trained health workers. In addition to training, periodic mentoring is also carried out to ensure that health workers and cadres can overcome the challenges they face during the implementation process.

4. Implementation of Home Visits

During the research period (June–August 2024), cadres conducted home visits to 1,095 families in six target villages. These home visits focused on collecting primary health data. The data

collected by cadres were then analyzed to see the level of health service coverage in each village (Damayanti et al., 2022; Santoso et al., 2023)

5. Data Analysis and Results Evaluation

Data collected from home visits were analyzed to identify health indicators that had not been achieved and to evaluate the results of the implementation of the home visit program. This analysis was conducted using descriptive statistical methods to map health problems in different population groups (Budianto & Wulandari, 2021; Wicaksono & Suryatmojo, 2022)

RESULT

Table 1.
Results of Mapping Health Problems in 6 Villages in South Tapanuli Regency

Target	Target Number	Problem	Specific Problems	Total	Percentage
Pregnant Mother	28	Missing Service (health services that have not been received by the target, patients who have not received primary health services)	Don't have a KIA book	9	32.1%
			No ANC 1/2/3	25	89.3%
			Don't drink TTD	6	21.4%
			Not attending prenatal classes	24	85.7%
			KEK mothers who do not receive PMT	3	10.7%
		Non compliance (non-compliance)	1	3.6%	
Pregnant Mother	28	Danger sign	Patients who show warning signs (examples: swollen feet, bleeding, fever), High Risk Pregnant Women (CED, Anemia, etc.)	2	7.1%
		Missing Service (health services that have not been received by the target, patients who have not received primary health services)	Don't have a KIA book	1	16.7%
Mother In Labor	6	Missing Service (health services that have not been received by the target, patients who have not received primary health services)	Can't get KF	0	0.0%
			Do not give birth at a health facility	0	0.0%
			Not taking Vitamin A	0	0.0%
		Non compliance (non-compliance)	Patients suffering from diseases (eg: DM, hypertension) who do not follow health care regulations (eg: taking medication)	0	0.0%
		Danger sign	Patients who show warning signs (examples: swollen feet, bleeding, fever), Postpartum mothers (postpartum with PE/PEB, HPP, hypertension, CS etc.)	0	0.0%
Baby (0-6 Months)	53	Missing Service (health services that have not been received by the target, patients who have not received primary health services)	Don't have a KIA book	11	20.8%
			Not immunized	7	13.2%
			Do not monitor falls	0	0.0%
			Cannot KN1-KN3	17	32.1%
		Non compliance (non-compliance)	Patients suffering from diseases (eg: DM, hypertension) who do not follow health care regulations (eg: taking medication)	0	0.0%
		Danger sign	Patients who show warning signs (eg: swollen feet, bleeding, fever), Neonatal Resti Visit (LBW, Premature etc.)	0	0.0%
Baby (6-72 Months)	424	Missing Service (health services that have not	Don't have a KIA book	139	32.8%
			Not immunized	289	68.2%

Target	Target Number	Problem	Specific Problems	Total	Percentage	
		been received by the target, patients who have not received primary health services)	Do not monitor falls	0	0.0%	
		Non compliance (non-compliance)	Patients suffering from diseases (eg: DM, hypertension) who do not follow health care regulations (eg: taking medication)	0	0.0%	
		Danger sign	Patients who show warning signs (examples: swollen feet, bleeding, fever), toddlers with malnutrition	0	0.0%	
Teenager	1102	Missing Service (health services that have not been received by the target, patients who have not received primary health services)	Not monitoring BB/TB	1055	95.7%	
			Adolescent girls do not undergo LILA examination	0	0.0%	
			Teenage girls do not drink TTD	460	41.7%	
			Teenage girls do not undergo anemia checks	543	49.3%	
			Not conducting PTM screening	1068	96.9%	
			Non compliance (non-compliance)	Patients suffering from diseases (eg: DM, hypertension) who do not follow health care regulations (eg: taking medication, taking TTD)	149	13.5%
			Danger sign	Patients who show warning signs (eg: swollen feet, bleeding, fever)	0	0.0%
Productive Age and Elderly	2680	Missing Service (health services that have not been received by the target, patients who have not received primary health services)	(Hypertension) Don't have a PTM book	2600	97.0%	
			(Hypertension) Not performing hypertension screening	2447	77.1%	
			(DM) Don't have a PTM book	2600	97.0%	
			(DM) Did not perform DM screening	2540	87.9%	
			Non compliance: Patients suffering from diseases (eg: DM, hypertension) who do not follow health care regulations (eg: taking medication)	Not taking hypertension medication	11	0.4%
			Not taking DM medication	236	8.8%	
			Danger sign	Patients who show warning signs (examples: swollen feet, bleeding, fever) Elderly Restless (paralyzed, impaired activity, etc.)	948	35.4%

The results of the study in Table 1 show the results of mapping health problems in six villages in South Tapanuli, which include target groups of pregnant women, mothers in labor, babies (0-6 months and 6-72 months), adolescents, and productive age groups and the elderly. In the group of pregnant women (28 people), it was found that 32.1% did not have a KIA book, 89.3% had not received complete antenatal services, 21.4% did not take Iron Supplement Tablets (TTD), 85.7% did not attend pregnancy classes, and 10.7% of mothers with Chronic Energy Deficiency (KEK) did not receive Additional Food Provision (PMT). In addition, there were 3.6% of mothers who did not participate in the monitoring of the Childbirth Planning and Complication Prevention Program (P4K), and 7.1% experienced pregnancy danger signs such as KEK or anemia.

In the group of mothers giving birth (6 people), 16.7% did not have a KIA book and 16.7% did not receive postpartum vitamin A capsules, while other services had been well received. In infants aged 0-6 months (53 people), it was found that 20.8% did not have a KIA book, 13.2% had not been immunized, and 32.1% had not received complete neonatal visits (KN1-KN3). Infants aged 6-72

months (424 people) showed 32.8% who did not have a KIA book and 68.2% had not received complete immunization. In the adolescent group (1,102 people), 95.7% did not monitor their weight and height, 41.7% of female adolescents did not consume TTD, 49.3% did not undergo anemia checks, and 96.9% had not undergone non-communicable disease (NCD) screening. Meanwhile, in the productive age and elderly groups (2,680 people), 97.0% did not have a NCD book for hypertension or diabetes, 77.1% had not undergone hypertension screening, 87.9% had not undergone diabetes screening, and 35.4% of the elderly showed high-risk symptoms, such as paralysis or impaired activity. These findings indicate that the level of coverage of basic health services, especially for immunization, growth monitoring, and NCD screening, is still low in various population groups.

DISCUSSION

The results of the study above show that the level of primary health care coverage in six villages in South Tapanuli is still at a low level, especially for antenatal care services, child immunization, and screening for non-communicable diseases (PTM) in adolescents and the elderly. This low level of coverage reflects various challenges in the implementation of home visit programs by posyandu cadres and the integration of primary health services. Factors such as lack of health monitoring, low awareness of the importance of health services, and limited infrastructure and resources also affect the effectiveness of health services in this area (Kementerian Kesehatan RI, 2023; Santoso et al., 2023).

More specifically, in the group of pregnant women, the figure of 89.3% who have not received complete antenatal care and 85.7% who have not attended pregnancy classes indicates a lack of access and perhaps also understanding of the importance of care during pregnancy. This is important to note considering that adequate access to antenatal care is closely related to preventing complications during pregnancy and childbirth. The Indonesian Ministry of Health itself has set standards for antenatal services to ensure that pregnant women receive the necessary examinations and treatment to reduce the health risks of mothers and babies (Kementerian Kesehatan RI, 2023). However, these findings indicate that the standard has not been fully achieved (Santoso et al., 2023; Wicaksono & Suryatmojo, 2022).

Research conducted by Kusnanto et al. (2021) shows that low coverage of antenatal care is often associated with socio-economic factors, education, and accessibility of health services. They found that in rural areas, pregnant women who have limited access to health facilities or transportation are less likely to receive complete antenatal care. This is in line with the findings in this study, where 89.3% of pregnant women have not received complete antenatal care in South Tapanuli, indicating limitations in access to services in rural areas (Kusnanto et al., 2021; Sapkota et al., 2022).

In the infant age group of 0-6 months and 6-72 months, low immunization coverage (68.2% incomplete for ages 6-72 months) indicates that the national immunization program still faces major challenges in its coverage. Immunization is an integral part of public health because it can prevent various infectious diseases. This low coverage can increase the risk of spreading diseases that can actually be prevented through vaccination. In addition, at the infant age, complete neonatal visits (KN1-KN3) are also low (32.1% have not received complete KN), which indicates obstacles in efforts to monitor the health of newborns (Damayanti et al., 2022; Wicaksono & Suryatmojo, 2022). Based on research by Putri et al. (2020), it was shown that the coverage of child immunization in rural areas is still low, often due to a lack of parental awareness of the importance of immunization and a lack of health workers available to carry out monitoring. In their study, the knowledge and understanding factors of parents were shown to influence their decision to immunize their children (Kates et al., 2019). The low immunization coverage of 68.2% in South Tapanuli indicates the need for health education interventions to increase public knowledge about the importance of immunization for their children (Putri et al., 2020).

The adolescent and elderly groups in this study also showed significant health problems. Data showed that 96.9% of adolescents had not undergone NCD screening, and more than 95% did not monitor their weight and height, which could result in minimal early detection of health problems such as obesity, anemia, or hypertension. Screening in adolescent and productive age groups is very important because this age group is when non-communicable diseases such as hypertension, diabetes, and anemia can begin to be detected. By increasing screening coverage in this age group, early prevention of chronic health conditions that may arise in old age can be carried out (Kementerian Kesehatan Republik Indonesia, 2023; Santoso et al., 2023). In the productive age group and the elderly, there were 77.1% who had not undergone hypertension screening, and 87.9% had not undergone diabetes screening. This shows that the community is not yet accustomed to self-monitoring their health, and many of them may not be aware of the health risks they are facing (Berntsen et al., 2019). This low coverage also reflects limitations in the implementation of health programs that should target the elderly with a more intensive approach. NCD screening in the elderly is important because it can detect chronic conditions that often appear at this age, such as hypertension and diabetes, which can reduce the quality of life of the elderly (Hartini et al., 2023; Kementerian Kesehatan Republik Indonesia, 2023).

In the context of non-communicable diseases (NCDs), a study by Setyawan and Lestari (2021) stated that monitoring and screening of NCDs in rural areas are still inadequate due to limited health workers and facilities. According to them, people are often unaware of the importance of NCD screening because they assume that their health condition is fine. The results of this study support the findings in South Tapanuli, where 96.9% of adolescents and 97% of adults did not have access to NCD monitoring. The study emphasized the importance of increasing public understanding through educational approaches and community-based health services (Setyawan & Lestari, 2021).

In multi-party collaboration in the implementation of home visits by cadres in South Tapanuli, each party has a role in it. Academics and practitioners from Padjadjaran University and Synergy Medical Health Services and Consultant play a role in increasing the capacity of health workers and the community by providing assistance and training, advocacy, and research. The private sector, namely PT. Agincourt Resources, acts as a funder in meeting basic needs, organizing training, and providing incentives for cadres in implementing home visits before the cadre incentive budget is budgeted by the local government in the following year. The community involved is the health cadres who will be the driving force behind the implementation of integrated posyandu (life cycle) and home visits. The local government is the Health Office and DPMD of South Tapanuli Regency, Batangtoru and Hutaraja Health Centers, Batangtoru and Muara Batangtoru Districts, with the support of the policies provided.

The implementation of the home visit program by Posyandu cadres, as part of the primary health care transformation efforts, has been proven to help improve access to health services by bringing services closer to the community. However, the results of this study also indicate that multi-party involvement, including the health office, local government, and the private sector, is essential for this program to run optimally. Multi-party collaboration, including the role of the private sector, is also an important aspect in efforts to improve access to health services in rural areas (Fanda et al., 2024). Research by Handayani et al. (2019) found that corporate social responsibility (CSR) programs can support primary health services in remote areas through more comprehensive support, such as the provision of medical devices and skills training for Posyandu cadres, who are at the forefront of health services at the household level (Handayani et al., 2019; Hartini et al., 2023; Suryati & Marlina, 2021). This support can improve primary health care coverage and enhance the effectiveness of home visiting programs as part of primary health care transformation.

The results of this study underline the importance of collaboration and support from various stakeholders. This cross-sector support not only helps Posyandu cadres in carrying out their duties but also increases public awareness of the importance of health services. A study by Rohmah and Sari (2022) stated that community participation in health programs is an important factor in the success of community-based health interventions. Therefore, active community involvement and strong coordination with the health office and the private sector are needed to achieve comprehensive and effective primary health services (Rohmah & Sari, 2022).

CONCLUSION

This study shows that the integration of primary health services through a home visit program by Posyandu cadres in South Tapanuli implemented through multi-party collaboration has proven effective in identifying and mapping health problems that need to be followed up to reduce the health burden in South Tapanuli. However, from the results obtained from the home visits, it is known that the coverage rate of basic health services in the area is still low. The main challenges faced include limited accessibility, low public awareness of the importance of basic health services, and minimal resources. However, multi-party collaboration involving the government, private sector, and community leaders has provided significant support. Through this collaboration, the home visit program has been successfully strengthened, both in terms of providing health facilities, funding, and increasing the capacity of cadres. This cross-sector collaboration has shown a positive impact in increasing program effectiveness and expanding the coverage of health services, but still requires optimization to deal with existing limitations.

REFERENCES

- Abudari, G., Hazeim, H., & Ginete, G. (2016). Caring for terminally ill Muslim patients: Lived experiences of non-Muslim nurses. *Palliative and Supportive Care*, 14, 599-611.
- Adhikari R, Grigulis A (2014). Through the back door: nurse migration to the UK from Malawi and Nepal, a policy critique. *Health Policy Plan* 29(2): 237–245. DOI: 10.1093/heapol/czt010.
- Adhikari R, Smith P. Global nursing workforce challenges: Time for a paradigm shift. *Nurse Educ Pract*. 2023 May;69:103627. doi: 10.1016/j.nepr.2023.103627. Epub 2023 Apr 1. PMID: 37018998; PMCID: PMC10066500.
- Aiken LH, Buchan J, Sochalski J, Nichols B, Powell M (2004). Trends in international nurse migration. *Health Affairs* 23(2): 69–77. DOI: 10.1377/hlthaff.23.3.69.
- Ajwad, M. I., Koettl, J., Radwan, I., Farole, T., Sanchez-Reaza, J., Chartouni, C., Alaref, J. J. S., Rivera, N., Sundararaman, V., & Afif, Z. (2022). Towards a National Jobs Strategy in Kuwait.
- Alameddine, M. , Bauer, J. M. , Richter, M. , & Sousa-Poza, A. (2017). The paradox of falling job satisfaction with rising job stickiness in the german nursing workforce between 1990 and 2013. *Human Resources for Health*, 15(1), 55. 10.1186/s12960-017-0228-x
- Albagawi B.S., Jones L.K. Quantitative exploration of the barriers and facilitators to nurse-patient communication in Saudi Arabia. *J. Hosp. Adm.* 2017;6:16. doi: 10.5430/jha.v6n1p16
- Aldossary A., While A., Barriball L. Health care and nursing in Saudi Arabia. *Int. Nurs. Rev.* 2008;55:125–128. doi: 10.1111/j.1466-7657.2007.00596.x
- Alhusaini M., Sun C., Larson E. (2016). Clinical nursing and midwifery research in Middle Eastern and North African countries: A scoping review. *Journal of Health Specialties*, 4(4), 238–245. 10.4103/2468-6360.191904
- Almutairi, A, McCarthy A, & Gardner G. (2014) Understanding cultural competence in a multicultural nursing workforce: registered nurses' experience in Saudi Arabia. *Journal of Transcultural Nursing*. (In Press)
- Alsadaan N, Jones LK, Kimpton A, DaCosta C. Challenges Facing the Nursing Profession in Saudi Arabia: An Integrative Review. *Nurs Rep*. 2021 May 31;11(2):395-403. doi: 10.3390/nursrep11020038. PMID: 34968216; PMCID: PMC8608082.
- Alshammari F. Unpublished Doctoral Dissertation. RMIT University; Melbourne, Australia: 2014. Nursing Leadership in the Ministry of Health Hospitals of Saudi Arabia.

- Alsufyani, AM, Alforihidi, MA, Almaliki, KE, Aljuaid, SM., Alamri, AA, Alghamdi, MS. (2020) Linking the Saudi Arabian 2030 vision with nursing transformation in Saudi Arabia: Roadmap for nursing policies and strategies. *International Journal of Africa Nursing Sciences* Volume 13, 2020, 100256 <https://doi.org/10.1016/j.ijans.2020.100256>
- Andersen, L. W., Holmberg, M. J., Berg, K. M., Donnino, M. W., & Granfeldt, A. (2019). In-hospital cardiac arrest: A review. *Journal of the American Medical Association*, 321(12), 1200–1210. <https://doi.org/10.1001/jama.2019.1696>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Asongu SA (2014). The impact of health worker migration on development dynamics: Evidence of wealth effects from Africa. *Eur J Health Econ* 15(2): 187–201. DOI: 10.1007/s10198-013-0465-4.
- Bauman, A., Fardy, H., & Harris, P. (2003). Getting it right: why bother with patient-centred care? *Medical Journal of Australia*, 179(5), 253-256.
- Benton DC, González-Jurado MA, Beneit-Montesinos JV (2014). Professional regulation, public protection and nurse migration. *Collegian* 21(1): 53–59. DOI: 10.1016/j.colegn.2013.01.001
- Bibi N. Mohd Yusuf, Norhayati Zakaria, Asmat-Nizam Abdul-Talib. 2021. Using social network tools to facilitate cultural adjustment of self-initiated Malaysian female migrant nurses in Saudi Arabia. *Journal of Infection and Public Health*, Volume 14, Issue 3, <https://doi.org/10.1016/j.jiph.2020.11.008>.
- Both-Nwabuwe JMC, Dijkstra MTM, Klink A, Beersma B. Maldistribution or scarcity of nurses? The devil is in the detail. *J Nurs Manag.* 2018 Mar;26(2):86-93. doi: 10.1111/jonm.12531. Epub 2017 Nov 7. PMID: 29114954.
- Buchan J (2006). The Impact of Global Nursing Migration on Health Services Delivery. *Policy Polit Nurs Pract* 7(Suppl. 3): 16S–25S. DOI: 10.1177/1527154406291520. & Beersma, B. (2018). Maldistribution or scarcity of nurses? the devil is in the detail. *Journal of Nursing Management*, 26(2), 86- 93.
- Caligiuri, PM. 2007. Selecting migrants for personality characteristics: a moderating effect of personality on the relationship between host national contact and cross cultural adjustment. *International Human Resources*. Routledge
- Efendi F, Kurniati A, Bushy A, Gunawan J. Concept analysis of nurse retention. *Nurs Health Sci.* 2019 Dec;21(4):422-427. doi: 10.1111/nhs.12629. Epub 2019 Jul 3. PMID: 31270927.
- Fatimah A. and Deepa T. (2008). Adverse nurse outcomes: correlation to nurses' workload, staffing, and shift rotation in Kuwaiti hospitals. *Applied Nursing Research*. Volume 21, Issue 3, Pages 139-146, ISSN 0897-1897, <https://doi.org/10.1016/j.apnr.2006.10.008>.
- Freeman M, Baumann A, Fisher A, Blythe J, Akhtar-Danesh N (2012). Case study methodology in nurse migration research: An integrative review. *Appl Nurs Res* 2
- Haddad LM, Annamaraju P, Toney-Butler TJ (2020). *Nursing Shortage*. Treasure Island (FL): StatPearls Publishing.
- Hajian, S., Yazdani, S., Jadidfar, M. P., & Khoshnevisan, M. H. (2020). Factors influencing the migration intention of health professionals in low- and- middle income countries: Critical review with a theoretical model. *J Contemp Med Sci*, 6(6), 256-261.
- Khaliq AA, Broyles RW, Mwachofi AK (2009). Global nurse migration: its impact on developing countries and prospects for the future. *World Health Popul* 10(3): 55–73.
- Lorenzo FME, Galvez-Tan J, Icamina K, Javier L (2007). Nurse migration from a source country perspective: Philippine country case study. *Health Serv Res* 42(3 Pt 2): 1406–1418. DOI: 10.1111/j.1475-6773.2007.00716.x.
- Lee, I., & Haines, A. (1991). Health Costs Of The Gulf War. *BMJ: British Medical Journal*, 303(6797), 303–306. <http://www.jstor.org/stable/29712540>
- Ministry of Health, (2018). *Statistical yearbook*. Available at: <https://www.moh.gov.sa/en/Ministry/Statistics/book/Pages/default.aspx/>

- Nursalam N, Chen C-M, Efendi F, Has EMM, Hidayati L, Hadisuyatmana S (2020). The Lived Experiences of Indonesian Nurses Who Worked as Care Workers in Taiwan. *J Nurs Res* 28(2): e78. DOI: 10.1097/jnr.0000000000000355.
- OECD (2024), “Fewer young people want to become nurses in half of OECD countries”, OECD Publishing, Paris, <https://doi.org/10.1787/e6612040-en>.
- Pallivathukkal, JK., Naresh, VR., and Venugopal, S. (2021). Helath care workers from middle east to the west amidst the Pandemic. Available at <https://www.jcdronline.org/admin/Uploads/Files/62441d50bd1432.86937820.pdf>
- PHR. (1991). Iraq occupied Kuwait : Health care situation 1991. Available at <iraq-occupied-kuwait-health-care-situation1991.pdf> (phr.org)
- Ross SJ, Polsky D, Sochalski J (2005). Nursing shortages and international nurse migration. *Int Nurs Rev* 52(4): 253–262. DOI: 10.1111/j.1466-7657.2005.00430.x
- Russo G, Fronteira I, Jesus TS, Buchan J (2018). Understanding nurses’ dual practice: A scoping review of what we know and what we still need to ask on nurses holding multiple jobs. *Hum Resour Health* 16(1): 14. DOI: 10.1186/s12960-018-0276-x.
- Saudi Health Council. (2019). The nursing workforce in Saudi Arabia : challenges and opportunities. Available at KSA_Nursing_Challenges_and_Opportunties_pub_6-22-20.pdf (shc.gov.sa)
- Sidumo, E. M., Ehlers, V. J., & Hattingh, S. P. (2010). Cultural knowledge of non-Muslim nurses working in Saudi Arabian obstetric units. 48-55.
- Shehabi, M. (2015). Kuwait following the gulf war. Available at <15.20Shehabi,M.AnExtraordinaryRecovery-KuwaitFollowingtheGulfWar.pdf>
- Van Bommel M. Migrant non-Muslim nurses’ experiences of working in a cardiac intensive care unit in Saudi Arabia; 2011.
- Wehbe-Alamah H, Doumit MAA, Bernstein J, Aboul-Enein BH. Nursing Research in Arab Countries: Current Status, Trends, Challenges, and Opportunities. *SAGE Open Nurs.* 2024 Apr 15;10:23779608241246871. doi: 10.1177/23779608241246871. PMID: 38628620; PMCID: PMC11020728
- WHO. (2018). Distribution of health workforce by sector and nationality (2013-2019). 2018, 2018–2019. <https://www.stats.gov.sa/en/1006>,
- WHO Kuwait. (2023). Country Cooperation Strategy for WHO and Kuwait 2023–2027. Available at Kuwait CCS 2023-2027_Final (un.org)
- World Health Organization. (2020). State of the world’s nursing 2020: investing in education, jobs and leadership. In Who. <https://www.who.int/publications/i/item/9789240003279>
- Young, R. (2010). Motivations and experience of health professionals who migrate to the United Kingdom. Evaluation of international recruitment of health professionals in England. *J Health Services Res Policy*, 15(4), 195-203.