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# HOME VISIT AS A STRATEGY TO INCREASE ACCESS TO PRIMARY HEALTH CARE: A SCOPING REVIEW

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## **ABSTRACT**

Primary Health Care (PHC) is a foundation of universal health coverage for enabling equitable access. However, the access barrier is one of the challenges in implementing PHC. Home visits becomes one of the PHC innovations in several countries. This review aimed to describe home visit implementation in various countries regarding the scope, and service providers to achieve the expected impacts. This descriptive study used scoping review method referring to Arksey and O'Malley's guidelines. Three databases, which are PubMed, ProQuest, and Embase, were searched using keywords, namely "home visit" and "primary health care" or "primary healthcare" or "PHC services". The articles' identification used the PRISMA method. From the search result that was limited to 2002-2022, 367 articles were retrieved and screened for titles and abstracts, resulting in 48 full-text articles for eligibility assessment. Finally, ten studies were further analyzed and synthesized according to the study's aim. The scope of home visits is a comprehensive life cycle approach. Services providers are community health workers, nurses, midwives, doctors, and multidisciplinary teams. The impact of home visits is increasing knowledge and healthy behaviour, utilization, service quality, and health status as well as encouraging cross-sectoral collaboration and interprofessional collaboration. The scope and the impact of the home visit were then categorized based on the three PHC components according to WHO. This research result can be used as input in the development of evidence-based policies for the implementation of home visits as part of the services provided by first-level health facilities with adjustments to the context in Indonesia.

#### **ABSTRAK**

Primary Health Care (PHC) merupakan fondasi universal health coverage karena dapat mewujudkan pemerataan akses. Namun hambatan terhadap akses masih menjadi tantangan yang ditemukan dalam pelaksanaan PHC. Home visit menjadi salah satu bentuk inovasi PHC yang dilaksanakan di sejumlah negara. Review ini bertujuan untuk memberikan gambaran pelaksanaan home visit di berbagai negara dalam kaitannya dengan ruang lingkup dan pelaksana layanan guna mewujudkan dampak peningkatan kesehatan yang diharapkan. Penelitian merupakan penelitian deskriptif menggunakan metode scoping review mengacu pada panduan Arksey dan O'Malley. Pencarian literatur menggunakan tiga database, yaitu PubMed, ProQuest dan Embase dengan kata kunci, yaitu "home visit" and "primary health care" or "primary healthcare" or "PHC services". Artikel diidentifikasi dengan menggunakan metode PRISMA. Dari hasil pencarian dengan batasan tahun 2002-2022, diperoleh 367 artikel yang dilakukan skrining terhadap judul dan abstrak, menghasilkan 48 artikel full-text untuk dinilai eligibilitasnya. Pada akhirnya sepuluh artikel terpilih dianalisis dan disintesis sesuai tujuan penelitian. Ruang lingkup home visit adalah pelayanan komprehensif yang mencakup seluruh siklus kehidupan. Pelaksana home visit adalah kader, perawat, bidan, dokter, maupun tim multidisiplin. Adapun dampak home visit peningkatan pengetahuan dan perilaku sehat, peningkatan utilisasi, kualitas layanan dan status kesehatan serta mendorong kerja sama lintas sektoral dan kolaborasi interprofesi. Ruang lingkup pelayanan serta dampak home visit tersebut selanjutnya dikategorikan berdasarkan tiga komponen PHC menurut WHO. Hasil penelitian dapat menjadi masukan dalam pengembangan kebijakan berbasis bukti untuk pelaksanaan home visit sebagai bagian dari pelayanan yang diberikan oleh fasilitas kesehatan tingkat pertama dengan penyesuaian konteks yang ada di Indonesia.

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## INTRODUCTION

The Alma-Ata Declaration in 1978 encouraged Governments and stakeholders to achieve health for all with Primary Health Care (PHC) as the key to making it happen (WHO, 2018). Primary Health Care is an approach that involves all elements to ensure that everyone (individuals and communities), wherever they are, gets equal opportunities for comprehensive health services as needed. There are three PHC components or approaches that are interrelated and synergize with one another (WHO and the UNICEF, 2018, 2020). First, meeting public health needs through comprehensive health services (promotive, protective, preventive, curative, rehabilitative and palliative) throughout the life cycle, strategically setting priorities for health services with individuals and families as targets through primary care and the community through public health function as a core element of integrated health services. Second, overcoming the health determinants (social, economic, and environmental factors, including individual characteristics and behaviour) through multi-sectoral policies and actions. And third, empowering individuals, families, and communities to optimize health, advocating for policies that promote and protect health and well-being.

In the Astana Declaration, PHC is mentioned as the foundation for achieving universal health coverage (UHC) and the Sustainable Development Goals (SDGs) (Walraven, 2019). Universal Health Coverage relies on a strong PHC system, partly because PHC enables equitable access (WHO and the UNICEF, 2018). However, barriers to access remain one of the challenges of PHC in its 40-year evaluation (WHO, 2019). Therefore, some innovations identified in member countries are home-based outreach services to guarantee a continuum of care as well as services for specific groups, such as the elderly who need long-term services. In WHO's Global Monitoring Report, PHC is the most cost-effective approach to meet the need for comprehensive services closer to homes and communities (WHO, 2019).

Home visits are an important intervention in improving health services for families and the overall health of the entire community (Diema Konlan et al., 2021). Several countries have developed strategies to strengthen primary health services, including in the form of home visits. Sweden through The Swedish Child Healthcare (CHC) system provides home visit services twice during the first year of a child's life for each family, which can improve the health of both the child and their parent (Mangrio et al., 2021). Several countries in Asia and Africa, including Bangladesh, India and Kenya conduct home visits to strengthen maternal and child health services by community health workers (Olaniran et al., 2019). Meanwhile, Cuba has been implementing a team-based approach to maintaining the health of each individual in the family through home visits since 1984 (Pineo, 2019).

Indonesia has several health policies that are implemented through home visits, including community health nursing (Perkesmas) and family visits as part of the Healthy Indonesia Program with Family Approach (PIS-PK) (Kemenkes RI, 2006, 2016). In the first pillar of health system transformation, which is the transformation of primary health services, the Ministry of Health encourages the integration of health services starting from Puskesmas to village-level services, including through Posyandu activities and home visits by community health workers (Kemenkes RI, 2022). In addition to that, home visits are part of both healthy visits and home visits for sick patients conducted by first-level health facilities (FKTP) as a form of service to achieve contact rates (BPJS Kesehatan, 2019). Achieving contact rates is one of the indicator that is difficult to meet in FKTP (Nofriyenti et al., 2019; Sandra et al., 2021; Widaty, 2017). Several studies recommend the importance of intensifying home visit implementation to accelerate the achievement of contact rates (Fadila & Katmini, 2022; Khujaefah et al., 2020).

Efforts to increase access through home visits have been implemented by countries around the world, including Indonesia. The home visit approach in various countries can provide input for the advancement of home visit implementation in Indonesia. Therefore, this study aims to provide an overview of home visit implementation in various countries regarding the scope and services provider to achieve the impact of improving health, as input for policy development in Indonesia.

## **METHOD**

This study is descriptive research using a scoping review design. The research was conducted from December 2022 to January 2023. The scoping review was carried out referring to Arksey and

O'Malley guidelines (Arksey & O'Malley, 2005). The review steps are 1) identifying research question, 2) identifying relevant studies, 3) study selection, 4) data charting, and 5) collating, summarizing and reporting the results. The first step is to formulate the research question: "How is home visit implemented in various countries and their impact on increasing access to primary health services?". The second step, identifying relevant study was conducted in December 2022 using databases, which are "PubMed", "ProQuest" and "Embase". The researchers combined keywords, namely "home visit" and "primary health care" or "primary healthcare" or "PHC services". The year limit of the research used is 2002-2022 and only articles in English were included.

From the search on the above keywords in the databases, 85 articles were obtained from PubMed, 54 articles from ProQuest and 228 articles from Embase making a total of 367 articles. In the third step, article selection was done after eliminating 85 duplicate articles. The inclusion criteria for selecting studies were those focused on home visit interventions, assessing the impact of home visits and available in full-text in English. The exclusion criteria were publications in a language other than English, conference abstracts, comments, and opinions. The researcher then screened the titles and abstracts and eliminated 234 articles leaving 48 articles for full-text review. The process eventually led to 10 articles being accepted, as illustrated in the PRISMA flow diagram (Figure 1). Next, in the fourth step, data charting was done using Microsoft Excel based on the author's name, year of publication, research location; method; research objective; and important results. This was done to extract relevant information for further analysis, and in the fifth step, the authors concluded and reported the result. Referring to the Astana Declaration, meeting healthcare needs is carried out through services throughout the life cycle (Walraven, 2019). The scope of home visits in this review will be identified according to the life cycle. Furthermore, the scope and impact will be categorized based on the three PHC components according to WHO.

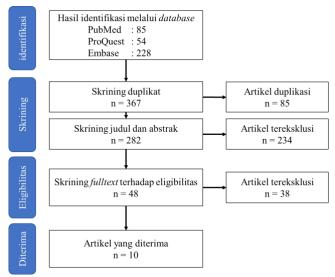


Figure 1. PRISMA Flow Diagram

## RESULTS

Among the 10 articles accepted, two articles were intervention studies (randomized controlled trials/RCT) (Luger et al., 2016; Mirmolaei et al., 2014), two articles were cross-sectional studies (Flores-Quispe et al., 2022; Nsibande et al., 2013), three articles were cohort studies (retrospective cohort dan population-based retrospective cohort) (Gu et al., 2016; Jones et al., 2020; Misra-Hebert et al., 2021) and three articles were qualitative studies (Campos et al., 2014; Kari et al., 2022; Silverman et al., 2018). In the RCT targeting postpartum mothers, the intervention group received health care through home visits by midwives, while the control group was only given services at health facilities (Mirmolaei et al., 2014). Meanwhile, in the RCT targeting elderly people, the first group received physical exercise support and nutrition-related intervention while the second group (control) received social support (Luger et al., 2016). The research locations spanned four continents (Asia, Africa, America and Europe)

in eight countries namely South Africa, Austria, Brazil, China, Finland, Iran, Canada, and the United States. The summary of the included studies is shown in Table 1.

 Table 1. Summary of Included Studies

Title, Author (s), Year,	Study	Study Aim	Results
Country  Healthcare utilization and patient and provider experience with a home visit program for patients discharged from the hospital at high risk for readmission, Misra- Hebert et al., 2021, Amerika Serikat	Design Cohort retrospective	To assess the association between health care utilization and mortality for patients at high risk for readmission who participated in the post-discharge home visit program.	Patients who received home visits by nurses every week for one-month post-hospitalization showed lower readmission rates. Patients showed increased knowledge related to the post-hospitalization recommendation with education and support during the home visits.
Quality of newborn healthcare in the first week of life in Brazil's primary care network: a cross-sectional multilevel analysis of the National Programme for Improving Primary Care Access and Quality – PMAQ, Flores-Quispe et al., 2022, Brazil	Cross- sectional	To estimate the prevalence of good quality child care in the first week of life under the PMAQ-AB and identify associated factors related to maternal, PHC facility and municipality characteristics.	Infants whose mothers received home visits from community health workers in the first week after birth were 96% more likely to receive good quality care than those who did not.
Emancipatory practices of nurses in primary health care: the home visit as an instrument of health needs assessment, Campos et al., 2014, Brazil	Qualitative	To identify emancipatory practices of primary care nurses to contribute to the improvement of health care.	Home visits done by nurses serve as a means to identify social determinants of health that will encourage improvements in the environment by related sectors, mobilize and reinforce community empowerment/participation.
Assessment of the uptake of neonatal and young infant referrals by community health workers to public health facilities in an urban informal settlement, KwaZulu-Natal, South Africa, Nsibande et al., 2013, Afrika Selatan	Cross- sectional	Report on the uptake of CHW referrals to describe the referral completion and health-seeking behaviour of the mother.	Home visits done by CHW improved the health of newborns and reduce the mortality rate due to the high completion of referrals (95%).
Comparison of Effects of Home Visits and Routine Postpartum Care on the Healthy Behaviors of	Randomized controlled trial	To compare the effect of two midwife home visits at home (intervention) to usual	The mother who underwent home visits by trained midwives showed improvements in health

Title, Author (s), Year, Country	Study Design	Study Aim	Results
Iranian Low-Risk Mothers, Mirmolaei et al., 2014, Iran	8	postpartum care at health facilities (control) on the healthy behaviours of low-risk Iranian mothers.	behaviours (including breastfeeding and family planning) compared to the control group.
Evaluation of a Community Health Service Center-Based Intervention Program for Managing Chronic Heart Failure, Gu et al., 2016, Cina	Prospective cohort	To examine the feasibility and applicability of the two most recommended forms of care delivery mode, home visits and telephone support, for CHF management in the setting of a community health service center (CHSC)	When compared to the telephone support group, patients who received home visits by trained doctors and nurses showed lower mortality and hospitalization rates.
Developing an interprofessional people-centred care model for home-living older people with multimorbidities in a primary care health centre: A community-based study, Kari et al., 2022, Finlandia	Qualitative	To develop an interprofessional people-centred care model (PCCM), including the contribution of a clinically trained pharmacist for homeliving multimorbid older people in primary care.	PCCM improved interprofessional collaboration in care planning and medicine optimization.  Patients show more involvement in their care and in maintaining their quality of life and physical performance.
Effects of a Home-Based and Volunteer-Administered Physical Training, Nutritional, and Social Support Program on Malnutrition and Frailty in Older Persons: A Randomized Controlled Trial, Luger et al., 2016, Austria	Randomized controlled trial	To examine the effect of home-based physical training and nutritional intervention program compared with social support intervention on nutrition and frailty status in older persons.	Home visit programs have the potential to prevent future health risks. Home-based physical training, nutritional, and social support intervention conducted by trained lay nonprofessionals can help to address malnutrition and frailty in older persons living at home.
The Value of Community Health Workers in Diabetes Management in Low-Income Populations: A Qualitative Study, Silverman et al., 2018, Amerika Serikat	Qualitative	To describe CHWs' roles in a diabetes self-management intervention	Through home visits, CHW can improve patient self-management knowledge and practice, finds out and provide input regarding challenging socioeconomic conditions and provide social support to patients.
Physician Home Visit Patterns and Hospital Use Among Older Adults with Functional	A Population- based	To examine the association between the provision of home visits by primary care	Patients whose physicians provided a higher level of home visits had fewer emergency

Title, Author (s), Year, Country	Study Design	Study Aim	Results
Impairments, Jones et al., 2020, Kanada	retrospective cohort study	physicians and subsequent use of hospital-based care among older adult patients with extensive functional impairments.	department visits and hospital admission.

## **Home Visits' Scope of Services and Providers**

Various countries implement varying home visits' scope of services and providers. The scope of services in this review is categorized based on the life cycle, specifically maternal and child health (Flores-Quispe et al., 2022; Mirmolaei et al., 2014; Nsibande et al., 2013), productive age and the elderly (Gu et al., 2016; Jones et al., 2020; Kari et al., 2022; Luger et al., 2016; Misra-Hebert et al., 2021; Silverman et al., 2018), and life-cycle approach (Campos et al., 2014). The home visits are mostly conducted by community health workers and nurses, followed by doctors, midwives, and multidisciplinary teams.

## Maternal and child health services

In a study conducted in South Africa, home visits were carried out by CHW to perform ante and postnatal services, including making referrals as needed (Nsibande et al., 2013). In Brazil, CHW conducted home visits within one week after childbirth to monitor the health of both mother and baby (Flores-Quispe et al., 2022). Home visits by trained midwives in Iran were carried out at 10-15 days and 42-60 days postpartum for both the mother and the baby (Mirmolaei et al., 2014). Home visit activities began with fostering relationships with mothers, identifying socioeconomic status and lifestyle, conducting general examinations including medical history, education, family planning consultation, and even identifying the possibility of domestic violence. Education is given based on the mother's socioeconomic status.

## Productive age and elderly health services

Home visits targeting productive ages and the elderly are carried out for people with chronic diseases. In a study on low-income diabetic patients aged 30-70 years in the United States, CHW conducted interventions related to diabetes self-management (Silverman et al., 2018). During home visits, CHW has sufficient time to provide in-depth diabetes self-management education and training. CHWs were also able to correct patients' consumption patterns and provide input on diets based on patients' socioeconomic conditions which were known during home visits. In a study in China, home visits were conducted to patients suffering from chronic heart failure by trained doctors or community nurses (Gu et al., 2016). During the visits, a comprehensive examination was carried out, including clinical, physical, psychological, drug usage review and other information related to social and family support, daily diet, and exercise habits. Based on the information and discussion with the patients and consultation among the team, a comprehensive management plan was developed.

For the elderly group, the target of home visits is specifically patients at risk of malnutrition, patients with multimorbidity, and post-hospitalization patients. In a study in Austria, home visits were conducted for two groups of malnourished elderly people by trained lay health workers (nonprofessional volunteers) (Luger et al., 2016). In the intervention group, volunteers assisted physical training to improve muscle strength and provided nutrition interventions through counselling to improve dietary patterns, ensuring good intake in the elderly. In Finland, home visits for elderly patients with multimorbidity involved a multidisciplinary team consisting of doctors, nurses and pharmacists (Kari et al., 2022). The service process began with a self-management evaluation questionnaire, followed by patients interviewed by nurses and pharmacists to explore health and social problems related to treatment, including identifying medicines and supplements consumed at home. Furthermore, health

reviews were carried out by nurses and clinical treatment reviews by a pharmacist, which was then discussed in a team conference meeting involving doctors to develop a treatment plan (general health and treatment) as well as an intervention to improve patient self-management skills.

In a study in Canada, home visits were conducted by doctors on elderly with functional impairments, including multimorbidity, with the primary goal of mitigating hospitalization (Jones et al., 2020). Meanwhile, in a study in the United States, advanced practice nurses and paramedics specifically conducted home visits four times in four weeks on post-hospitalization patients (Misra-Hebert et al., 2021). During home visits, nurses provided education on medicines consumed, ensures that the discharge instructions were understood by the patients, and provided social support for the patients.

# Life-cycle approaches to health services

In a study in Brazil, home visits were part of the family health strategy (Campos et al., 2014). The nurses who conducted home visits provided interventions to the entire family member according to their respective problems. In addition to providing clinical services, home visits are means for nurses to identify health needs and health determinants (social and economic characteristics) both at the individual and community levels. Nurses also help people understand and fight for the right to health and encourage people to improve their health. Furthermore, the findings from home visits were communicated to the city government and related organizations through communication forums to jointly address the issues.

## **Home Visits' Impact**

The impact of home visits was found to be relatively diverse. The impact was categorized into aspects such as improving knowledge and healthy behaviours, increasing utilization, improving service quality and health status, as well as encouraging cross-sectoral collaboration and interprofessional collaboration.

## Increasing knowledge and health behaviour

Home visits targeting mothers, children, the elderly, patients with chronic diseases such as diabetes mellitus, and post-hospitalized patients have impacts on improving knowledge and healthy behaviour. Home visit interventions focused on medical education and post-hospitalization recommendations can increase patients' knowledge regarding these matters (Misra-Hebert et al., 2021). A study in Iran showed that the behaviour of mothers regarding breastfeeding and family planning improved in the intervention group (postpartum home visit services by trained midwives) compared to the control group (receiving services in health facilities) (Mirmolaei et al., 2014). In addition, the role of CHWs who conducted home visits showed high levels of compliance with referrals (95%) (Nsibande et al., 2013). Patients who received home visits were more actively involved in efforts to maintain their health and quality of life (Kari et al., 2022). Furthermore, patients received feedback and strengthen their knowledge and skills in self-management of diabetes (Silverman et al., 2018).

## Increasing utilization, service quality and health status

Infants born to mothers who received home visits one week postpartum were 96% more likely to receive quality service compare to those who did not. The services provided during home visits measuring the baby's weight and length, heel prick test, umbilical cord examination, breastfeeding observation, and counselling on the baby' safe sleeping position (Flores-Quispe et al., 2022). The home visit in RCT in Austria where lay health workers together with the elderly in the first group performed exercises and discussed nutrition-related aspects and the second group provided social support can help to address nutrition and frailty syndrome status. The prevalence of impaired nutritional status decreased respectively by 25% and 23% in the first and second groups. Furthermore, frailty prevalence also decreased respectively by 17% and 16% in the first and second groups (Luger et al., 2016).

A study in China compared two forms of care delivery for chronic heart failure patients, home visits and telephone support (Gu et al., 2016). Patients in home visit group showed a reduction in all-cause mortality, and hospitalization due to cardiac or any cause compared to the telephone support group. A retrospective cohort study in the United States showed that high-risk patients who accepted home visits for four weeks after hospital discharge showed lower 30-day readmission compared with

those who declined (Misra-Hebert et al., 2021). A population-based retrospective cohort study in Canada showed that patients who provided a higher level of home visits had fewer emergency department visits and hospital admission (Jones et al., 2020).

## Encouraging cross-sectoral collaboration and interprofessional collaboration

Home visits not only provide healthcare but also act as instruments to identify health needs and social determinants of health (Campos et al., 2014). Nurses as home visits providers can understand the whole family, where and how they live and the working environment that determines their health conditions. As a follow-up after the home visit, a meeting that involved the community, local government and organization was held to solve social determinants that cause health problems. Ultimately, this leads to empowering the community to know their needs and rights, mobilizing and encouraging stakeholders to solve the problem. Home visits not only has a positive impact on the community but can also enhance interprofessional collaboration among healthcare professional involved (Kari et al., 2022). In that study, doctors, nurses and pharmacists collaborated in planning and implementing services for the elderly with multimorbidities.

# **DISCUSSION**

The finding from this scooping review showed that numerous countries implement home visits with various scopes, providers and expected impacts. The finding will be discussed according to the three main components of PHC, which are 1) integrated health services with an emphasis on primary care and essential public health functions; 2) multisectoral policy and action; 3) empowered people and communities (WHO and the UNICEF, 2018, 2020).

# Integrated health services with an emphasis on primary care and essential public health functions

Home visits are carried out for the target group which are mother and child, productive ages, and elderly to provide comprehensive health services according to life-cycle or specific to certain diseases. This review showed home visits for mother and child was mainly carried out for post-partum services (Flores-Quispe et al., 2022; Mirmolaei et al., 2014). Only one study included home visits for both antenatal and postnatal care (Nsibande et al., 2013). In the United States, several states including the District of Columbia and Minnesota provide prevention and early intervention services for families with pregnant mothers and children from birth to five years old through home visits by trained volunteer staff (DC Home Visiting Council, 2020; Minnesota Department of Health, 2018). While in Malawi, home visits by CHWs are conducted throughout pregnancy until after delivery to improve infant survival rates (Guenther et al., 2019). Mothers who receive home visits show an improvement in healthy behaviours such as breastfeeding and family planning (Mirmolaei et al., 2014). That finding is in line with a study showing an increase in breastfeeding coverage through education during home visits, but in this study, the home visit started during pregnancy (McGinnis et al., 2018). Therefore, it is important to pay attention to the initial period of conducting home visits for mother and child to gain the expected impact.

According to the result of the review, home visits in the productive age and elderly groups were mainly carried out as an intervention for non-communicable diseases. Apart from non-communicable diseases, home visits can also be carried out to detect cases of infectious diseases, such as tuberculosis. A systematic review shows that home visit is more effective in finding TB cases (Amare et al., 2023). In Cuba, home visits are organized by a team consisting of doctors, nurses and public health workers who aim to find health problems before they become serious illnesses (Pineo, 2019). The review results also showed that home visits are associated with a reduction in hospital admission and readmission rates (Jones et al., 2020; Misra-Hebert et al., 2021). This is consistent with an RCT in Iran on post-operative type 2 diabetic patients, the intervention group received a home visit by an interprofessional team for three months (Faridani et al., 2021). The results showed that the services provided during home visits reduce readmission and patient mortality rates. However, different results were shown in an RCT in Denmark, where a single home visit post-hospitalization by a nurse did not affect patient readmission and mortality rates (Lembeck et al., 2019). In studies that showed the relationship between home visits and reduction in hospital readmission, home visits were conducted at least four times by nurses and paramedics (Misra-Hebert et al., 2021), even for three months after surgery by interprofessional team

(Faridani et al., 2021). Therefore, it is important to consider the frequency and duration of home visits to post-hospitalization patients to achieve the expected outcomes. In the context of Indonesia, home visits are one of the services provided by FKTP (BPJS Kesehatan, 2019). These visits can be utilized as a part of post-hospitalization care for patients to reduce readmission rates.

## Multisectoral policy and action

This review showed that home visits by nurses were identified as the first step in implementing multisectoral action to address health determinants in a study conducted in Brazil (Campos et al., 2014). This is consistent with the role of nurses in screening social determinants of health through home visits and collaborating with multiple sectors to meet community needs (Tiase et al., 2022). In Cuba, home visits are not only used for providing health services but also aim to collect data and information (Pineo, 2019). The information gathered is then presented in local meetings with community groups every month. In a study in Jayapura, community health workers conducted home visits to identify determinants of latrines availability in one village. The results then shared with stakeholders and being followed up with cross-sectoral collaboration (Batticaca & Kristina, 2021). Home visits in the Healthy Indonesia Program with a Family Approach (PIS-PK) provide data on family health conditions in Puskesmas (Kemenkes RI, 2016). However, from the results of the Ministry of Health's evaluation published by Sulistiowati et al. (2020), only 56,33% of Puskesmas utilize the data, therefore, that study encourages data analysis training for Puskesmas, so that the data can be used to advocate the Village and District Government.

# **Empowered people and communities**

This review showed that home visits can be carried out as part of community empowerment efforts to support the improvement of self-management capacity for some health problems. Home visits intervention has shown improvement in skills for diabetes self-management (Silverman et al., 2018). This is consistent with the result of an experimental study in rural areas in Guatemala that showed diabetes self-management education through home visits can improve knowledge and skills and even decrease Hemoglobin A1c levels compared to baseline (Flood et al., 2017). This is also supported by the result of a systematic review and meta-analysis, which demonstrated that visits can improve glycemic control and reduce cardiovascular risk factors (Han et al., 2017). In community health nursing programs in Indonesia, home visits are one of the nursing care methods. Home visits as part of PIS-PK that are carried out simultaneously with nursing care have been shown to improve Family Health Index and family independence level (Haris et al., 2020).

## **CONCLUSION**

Home visits can be implemented in various scopes of services and providers to achieve the expected impact. Based on the results of the scoping review, home visits can be carried out to deliver three approaches or components of PHC according to WHO, namely 1) integrated health services with an emphasis on primary care and essential public health functions; 2) multisectoral policy and action; 3) empowered people and communities. The implementation of home visits in Indonesia needs to consider the timing, frequency and duration to obtain the expected impact.

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