

REVIEW ARTICLE

---

## A SYSTEMATIC REVIEW OF HEALTH PROMOTION PROGRAM AMONG PATIENTS WITH CARDIOVASCULAR DISEASE IN PRIMARY HEALTH CARE

Rizkiyani Istifada<sup>1\*</sup>, Ety Rekawati<sup>2</sup>

1 Master Student of Community Health Nursing, Faculty of Nursing, Universitas Indonesia, Depok, Indonesia

2 Department of Community Health Nursing, Faculty of Nursing, Universitas Indonesia, Depok, Indonesia

\* Correspondence: [rizkiyani.istifada71@ui.ac.id](mailto:rizkiyani.istifada71@ui.ac.id)

### Abstract

Health promotion is a method to increase awareness of healthy behavior in public. Unhealthy lifestyles cause increases the risk of cardiovascular disease. Community health nurses have a responsibility to increase the motivation of healthy practice with the health promotion's method. This research method used a systematic review, using online databases on Cambridge Core, Wiley Online, and Science Direct e-resources when the articles published from 2006-2018. The selection of literature used the Critical Capability Program (CASP) tool and got eight relevant articles. The systematic analysis used the Cochrane Collaboration. The themes of this article are 1) nurses' knowledge about health promotion, 2) the meaning of health promotion, and 3) the implementation health promotion of cardiovascular disease prevention by nurses. The themes identified some categories, such as nurse responsibilities, the essence of health promotion, support and barriers, and health promotion's method. The nurse's perception about health promotion is the core of their work to decrease the prevalence of the cardiovascular disease.

**Keywords:** cardiovascular disease, health promotion, nurses, primary health care

---

International Journal of Nursing and Health Services (IJNHS), September 2019, Volume 2, Issue 3; Page 22-31

Received: 29 March 2019; Revised: 18 April 2019; Accepted: 25 April 2019

Doi: <http://doi.org/10.35654/ijnhs.v2i3.113>

---

### 1. Introduction

Health promotion is an effort to improve health status in the community (1). The implementation of health promotion is one of the strategies formulated by the program of Sustainable Development Goals (SDGs). Health status development goals are listed in the program of Sustainable Development Goals (SDGs), especially to confirm a healthy life and to promote prosperity for everyone of all ages (2). The implementation of health promotion is an effort to reach on target of reducing the mortality rate of cardiovascular disease. This is stated in the goal to reduce 25% mortality rate from the non-communicable disease in 2025 in Indonesia (2).

Cardiovascular disease is the cause of death with the highest prevalence (45%); it's compared to other types of non-communicable disease (3). The main risk factors for cardiovascular disease are caused by smoking, consumption of alcoholic, lack of physical activity, and unhealthy diets (4). This condition can be prevented

with maintaining a healthy behavior or get the support of health promotion from a health provider. In the qualitative research by Lundberg et al., health providers as facilitators can improve the success of lifestyle interventions (5).

Community health nurses are one of the health providers in accessing the community (6). Nurses have a responsibility to improve the healthy behavior of the community with on implementing health promotion (7). A previous study showed the correlation between skills and nurses' competency to improve the health services at primary health care (8). The prevention of non-communicable disease can be implemented with the methods of training and counseling, which influence to improve healthy lifestyle, physical activity, and nutritional balance (9). The qualitative research study by Lundberg et al. describes that the consultations of health can improve lifestyle and reduce risk factors of cardiovascular disease (5).

The importance of nurses' perceptions was considered for implementing the health promotion of cardiovascular disease (10). From the case, we need research about nurse experience in implementing the health promotion of cardiovascular disease prevention. This is consistent with recommendations of quantitative research by Kaufman et al. shows the importance of evaluating nurses' knowledge and their performance to control the non-communicable disease with qualitative methodologies (11). This article describes the experience of nurses in implementing health promotion using a systematic review of qualitative studies. In general, qualitative studies have limitations in the characteristics of generalization due to the small sample size (12). Therefore, the thematic analysis of qualitative studies is used to identify the meaning of nurse experience in implementing the health promotion of cardiovascular disease prevention.

## **2. Objectives**

The study aimed to identify the nurses' experience of implementing the health promotion of cardiovascular diseases prevention at primary health care.

## **3. Methods**

This study used a systematic review in two stages, 1) Search literature from the database and 2) the selection of literature based on inclusion criteria. The inclusion criteria of this study including full-text articles, using qualitative research, and articles that discussed nurses experience in implementing the health promotion in primary health care, in the publication of articles from 2006-2018

### **3.1 Literature Search and Database**

The search for qualitative studies covered the period published from 2006-2018 using Cambridge Core, Wiley Online, and Science Direct database. The keyword searched to find the relevant article, including "*health promotion*," "*community health nurses*," "*disease management*," and "*nurse experience on health promotion*." After that, screening based on abstracts and 82 articles were found from the database. Consisting of Wiley (11 articles) and Science Direct (71 articles). Also, this systematic review uses Google Scholar to find additional literature based on references from several articles. After article screened, eight articles were reviewed to describe the nurse experience in health promotion for cardiovascular disease prevention at primary health care (Figure 1).

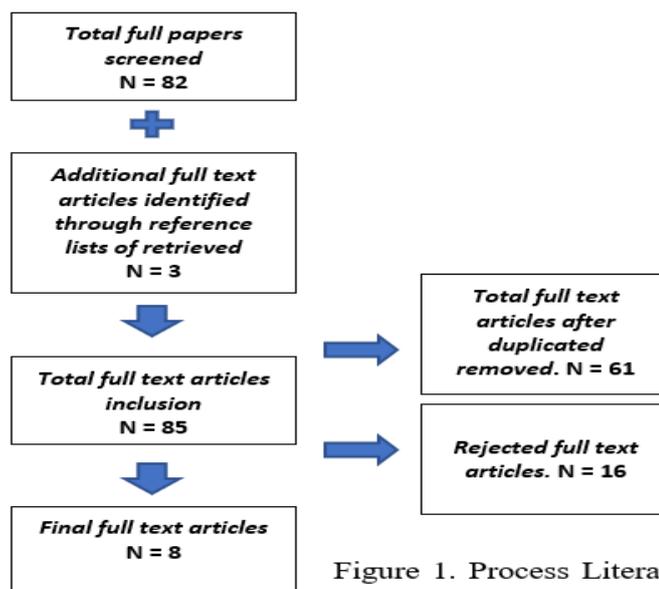


Figure 1. Process Literature Search

### 3.2 Bias monitoring

Critical Appraisal Skills Program (CASP) tools were used to appraise the studies (13). This tool is commonly used for qualitative studies (Table.2)

### 3.3 Data analysis

Cochrane Collaboration was used for systematic analysis of qualitative study reviews (14). This method not only identifies the number of phrases or words but also identifies implicit and explicit ideas in the study (15). Thematic analysis is used in qualitative studies that focus on themes in the generated article. This article described several themes in Table. 3.

## 4. Results

### 4.1 Characteristic Study

The article reviewed various types of research designs, sample variations, and data collection methods (Table.1). Six articles discuss research topics regarding nurses' understanding of implementing health promotion (16–21). One article discusses nurses' understanding of the implementation of leadership in health promotion (22). One article discusses nurses' experience in implementing health promotion (5). The method of data collection used semi-structured interviews, observations, field notes, focus group discussions, and open question questionnaires. Variations in the number of sample participants were between 1-58 nurses, the study using one nurse in a case study qualitative research design (16) and the study using a qualitative survey involved 58 nurses as participants (18).

**Table 1.** The Result of Literature Search

No	Author	Methods	Sample	Data Collection	Result
1.	Furunes, Kaltveit, & Akerjordet, (2018)	Qualitative Descriptive	12 nurses	Semi-structured Interview	Themes: Nurses' knowledge about the work environment in the implementation of health promotion; Nurses' knowledge about the leadership on implementing health promotion; Health promotion leadership can promote nurses
2.	Lundberg et al. (2017)	Qualitative	12 nurses	Semi-structured Interview	Themes: The meaning of health promotion, the process of implementing the health promotion; The support tools to implementation the health promotion; Support & obstacles; Satisfaction & dissatisfaction on performing the health promotion
3.	Runciman (2014)	Qualitative: Case Study	One nurse	Observation, interview, and field notes	Themes: The primary purpose of implementing the health promotion; The health promotion benefits; The health promotion barriers
4.	Brobeck & Odenkrants (2013)	Qualitative Descriptive	16 nurses	Focus Group Discussion (FGD)	Themes: Training as motivation to implement the health promotion; Lack of fundamental in the implementation of health promotion; Lack of coverage of the application of health promotion
5.	Keleher & Parker (2013)	Survey Qualitative	58 nurses	Opened Question Questionnaire	Themes: Description of nurses in the implementation of health promotion; Opportunities on implementing the health promotion; The potential of nurses on implementing the health promotion; The obstacles to achieving the health promotion
6.	Wilhelmsson & Lindberg (2009)	Qualitative Descriptive	54 nurses	Interview	Themes of Support: knowledge, criteria, characteristics that are required to implementation the health promotion  Themes of Obstacles: the weaknesses in implementing the health promotion
7.	Casey (2007)	Qualitative	Eight nurses	Semi-structured Interview	Theme: implementation of health promotion
8.	Jerdén, Hillervik, Hansson, Flacking, & Weinehall (2006)	Qualitative	12 nurses	Interview	Themes: independent work and collaboration, interest in nurse and patient relationships, patient responsibility, and sharing of responsibilities between patients and caregivers.

**Table 2.** The Critical of 8 Articles with *the Critical Appraisal Skills Program (CASP) Tools*

Item	1	2	3	4	5	6	7	8
Was there a clear statement of the aims of the research?	+	+	+	+	+	+	+	+
Is a qualitative methodology appropriate?	+	+	+	+	+	+	+	+
Was the research design appropriate to address the aims of the research	+	+	+	+	+	+	+	+
Was the recruitment strategy appropriate to the aims of the research?	+	+	+	+	+	+	+	+
Were the data collected in a way that addressed the research issue?	+	+	+	+	+	+	+	+
Has the relationship between the researcher and participants been adequately considered?	-	±	-	-	-	-	-	-
Have ethical issues been taken into considerations?	+	+	±	±	+	+	+	±
Was the data analysis sufficiently rigorous?	+	+	±	+	+	+	+	+
Is there a clear statement of findings?	+	+	+	+	+	+	+	+
How valuable is the research?	±	±	+	±	+	±	+	±
Score/10	8	8	7	7	9	8	9	7

(+) Yes; (-) No; (±) cannot tell

Higgins & Kane (2010)

**Table 3.** Thematic Analysis Systematic Categories of Qualitative Review with the Cochrane Collaboration

Items	1	2	3	4	5	6	7	8	Total
Barrier	+	+	+	+	+	+	+	-	7
Understanding nurses about health promotion	-	-	+	-	+	+	+	+	5
The essence of health promotion	+	+	+	-	-	-	+	-	4
Support health promotion	+	+	-	+	-	-	+	-	4
The implementation method of health promotion	-	+	-	-	+	-	+	-	3
Work environment	+	-	-	-	-	-	-	-	1
The leader of health promotion	+	-	-	-	-	-	-	-	1
Tools of measurement health promotion	-	+	-	-	-	-	-	-	1
Satisfaction	-	+	-	-	-	-	-	-	1
Dissatisfaction	-	+	-	-	-	-	-	-	1
The benefit of health promotion	-	-	+	-	-	-	-	-	1
Opportunity for health promotion	-	-	-	-	+	-	-	-	1
Criteria	-	-	-	-	-	+	-	-	1
Characteristic	-	-	-	-	-	+	-	-	1
The participation of the patient	-	-	-	-	-	-	+	-	1
Autonomous and collaboration	-	-	-	-	-	-	-	+	1
Relationship between nurses and patient	-	-	-	-	-	-	-	+	1
Responsibility	-	-	-	-	-	-	-	+	1

(+) Yes; (-) No

#### 4.2 Themes

The results of the thematic analysis identified barriers and support when conducting health promotion about cardiovascular disease, the meaning of health promotion, nurse knowledge, and the methods when implementing health promotion (Table. 3). The results of this study were analyzed using thematic analysis, such as 1) nurse' knowledge about the health promotion, 2) the meaning of health promotion, and 3) the implementation of health promotion about cardiovascular disease prevention by nurses.

#### 4.2.1 Nurse Knowledge

##### *Description of health promotion*

Nurses who are working at primary health care can describe the definition of health promotion. They also provided information for patients in which focused on health behavior to prevent and maintain good acts (18,20). The nurse defines "Health promotion to inform and provide education for the public about disease prevention based on evidence-based clinical information" (18).

The implementation of health promotion can be done collaboratively and independently. Community health nurses describe themselves as both collaborators and independent health providers (21). However, one nurse expressed that as a collaborator often gets a response that causes the weak implementation of health promotion, "Care disease is more priority than health promotion. Therefore health promotion is not the main obligation so that you can ignore them" (21). Nurses recognize the importance of implementing health promotion, but health promotion is ignored by another health provider (21).

##### *Responsibility*

Nurses in primary health care have responsibilities for implementing health promotion. The implementation of health promotion must be done on focus by specialist nurses who are responsible for the intervention of chronic patients (19). Nurse opinion related to this "In my opinion, nurses in primary health care have a big responsibility, therefore the importance of being a nurse specialist" (19). Nurses must also be able to empowerment for patients and their families to maintain care (21).

#### 4.2.2 The Meaning of Health Promotion

##### *Health promotion is the primary value of nurses in primary health care*

Nurses describe that health promotion is the main essence of their work in primary health care (5,16,20,22). Health promotion is needed to improve the healthy behavior of patients "The implementation of health promotion is an opportunity to change life behaviors to be healthier for individuals" (5). The nurse admits that health promotion is necessary and valuable, but its implementation shows that some patient behavior is difficult to change (20). Therefore, the nurse said the importance of efficacy to improve self-assessment, so this condition tends to bring nurses to not give up on implementing health promotion (22). "I am confident in the knowledge that I have, but I know that there is the possibility to ask my friend (nurse) if I feel insecure" a statement by one of the nurses (22).

##### *The implementation of health promotion established a burden on nurses*

Some nurses said that the application of health promotion caused a burden. The feeling of the burden is caused by the sense of stress that the nurse has to determine the priority between health promotion and disease prevention (5). Expressions by nurses "Sometimes I feel there is no hope! I have many DM patients in my work area, and they have many risk factors, so I don't know where I started". Another burden felt by nurses related to the policies issued that prioritized to patients who have paid off payment for care, so health promotion is not carried out by all communities (5).

##### *Health promotion stimulates changes by nurses*

The implementation of health promotion can provide adjustments to nurses. Nurses,

when carrying out their roles, often demand the attitude of professionalism. This condition has an effect of changing the lifestyle of nurses. One nurse expressed, *"Often I do health promotion about the cardiovascular disease to patients providing stimulation to me as a professional, and this gives me satisfaction"* (5).

#### **4.2.3 The Implementation of Health Promotion about Cardiovascular Disease Prevention by Community Health Nurses**

##### *Support*

The nurse explained some of the support needed to do health promotion, such as the condition of the work environment, help from the leadership, the relationship between colleagues and patients, improvement of nursing education, and development of health promotion in media facilities (5,17,20,22). Mental health conditions in the work environment make it easier than physical health for nurses to implement health promotion (22). The nurse explained that a comfortable environment requires freedom in duty (22).

This is done to energize change to the client *"I like my job in carrying out health promotion. I enjoy the freedom and decisions made by myself"* (22). Nurses also express that the implementation of health promotion is influenced by support from the leader, such as giving feedback, opening opportunities to develop themselves, and having a positive attitude to their staff (5,22). *"We have managers who have a positive attitude when carrying out health promotion; this is very nice for us, I found a role model"* (5).

Nurses also need good relationships with their colleagues and patients. Sharing knowledge between nurses can increase motivation to develop themselves (22). Good relationships with patients also enhance the implementation of health promotion *"I understand when we build relationships with patients, it can increase familiarity"* (20). Besides, nurses expressed the importance of improving the quality of human resources by providing training, as well as developing media facilities (pamphlet) *"I think that health promotion should be a top priority. We should be very good at understanding the impact of healthy living behavior, so we are transparent in doing work"* (20-21).

##### *Barrier*

The nurse describes several obstacles in carrying out health promotion, such as lack of knowledge and skills, lack of time in implementation, and lack of concepts (5,17,18,20). The nurse described that the lack of knowledge possessed by coworkers resulted in frustration *"I am tired of being an agent of change! Is it challenging to do health promotion? I have taken a different course and tried to spread the knowledge that I had work, but some people never learned! I believe that some people are not suitable to work on health promotion and disease prevention, because it is following the knowledge they have"* (5). In addition to nurses' perceptions of the performance of colleagues, half of the nurses acknowledged that lack of education, training, and skills are obstacles in carrying out health promotion (20).

A little time is also an obstacle to carrying out health promotion (18,20). Nurse's expression *"... we don't have time ... there is a lot of work that must be done every day here ... we don't have physical time"* (20). Health promotion is obstructed when no

fundamental governs its implementation (5,17). Nurses describe that proper management can increase responsibility for implementing health promotion (17). Three nurses describe, "All decisions are made with each of our minds, must sound good to appear to have a vision, but this is rarely successful in your practice ... your words become empty words" (17). There is no fundamental to do the health promotion which is causing no organizational structure to form "in our health services there is no organized structure, I believe we know health promotion should be done, but there is no scheme of who should do, what to do, and when it is done" (17).

#### *The Implementation Method*

The nurse explained several methods of implementing health promotion by counseling, education, supporting tools, and patient review and recall (5,18,20). The nurse told that counseling and coaching is a method of delivering healthy behavior (5). Nurses do advice to suggest for clients, while coaching is done to build the character of the client to make lifestyle changes (5). The use of brochures can facilitate implementing the counseling "... I have several brochures from the National Food Agency about nutrition and food consumption. Patients often ask questions about suggestions written, and I believe this makes it easier for patients to understand information. Also, patients can take it home"(5). The contents of health promotion that was given to clients included wound care, healthy living behavior, deep breathing relaxation, breast detection, physical activity, the dangers of smoking, and consumption of healthy foods (20). Nurses also explained to make it easy for clients on implementing health promotion with assisted the several tools, such as Physical Activity on Prescription (PAP), Motivational Interviewing (MI). "Individually, these tools often help with lifestyle changes ... "(5). Also, the existence of a healthy dialogue for patients can facilitate lifestyle changes; the dialogue begins with the assessment of patient needs with a review and recall strategy (5,18).

## **5. Discussion**

Three themes generated from this article describe the implementation of health promotion of cardiovascular disease by community health nurses in primary health care. In the theme of knowledge, the nurses explain their understanding of the definitions and responsibilities in health promotion (18-21). Overall, nurses in primary health care are aware of their obligations conducting health promotion to prevent the occurrence of disease (19). In an implementation, nurses realize that often, the application of health promotion is not a priority (19,21). This happens because nurses are still focused on curative care to accelerate healing of patients. Role of the government in supporting the implementation of health promotion is still not optimal (16,19). This is one of the supports needed by nurses in primary health care. Support from the government and collaboration with other interpersonal teams can increase motivation for nurses to provide education for the community. Nurses realize that health promotion is the principal value of their work. Implementation of health promotion will improve the healthy behavior of the community. However, nurses recognize the importance of increasing knowledge. This is done as an effort to optimize the quality to implement health promotion. The media of health promotion can be by providing education in training and media leaflets to increased knowledge (17,20). In addition to providing the quality of health service for the community that implementing health promotion provides a lot of learning for nurses. Nurses provide health education to the community make themselves stimulated to create a healthy lifestyle (5).

Nurses also realize the importance of sharing knowledge with peer nurses (22). This condition will increase the motivation of nurses to carry out self-development because the experience of each nurse is different when they implement health promotion. Supporting from leaders and their family members are also a determining factor in carrying out health promotion (23). A good leader for nurses is one who can appreciate his staff, opens opportunities to develop himself, and provides advice when evaluating his team (5,22). A leader who always gives positive values can make him/herself a role model for his/her staff.

In general, nurses conduct health promotions about healthy behaviors. This is done to maintain health and to prevent cardiovascular disease. The material of healthy behavior delivered, such as physical activity, healthy diet, mental health, and the dangers of consuming alcohol and smoking. Education on healthy living behavior can be done with counseling and coaching methods (5). The nurse explained that the implementation of health promotion was more optimal by using health promotion media, such as leaflets, brochures, and booklets. This media tool can help clients remember health education messages to be expected to be able to convey health information to the surrounding environment. For nurses, it is essential to evaluate community lifestyle changes after being given a health promotion. This can be monitoring of nurses to assess their success in delivering health information for the public.

## 6. Conclusion

This article identifies three themes, 1) nurse knowledge about health promotion, 2) the meaning of health promotion, and 3) implementation of health promotion. Primary health care is health facilities at the first level. Therefore nurses acknowledge their responsibilities as health providers to be able to increase community independence. This can be realized by optimizing the implementation of health promotion. Nurses describe that health promotion is a necessary intervention that must be done. Education and counseling are methods of health promotion that are used by nurses. This implementation requires support to minimize the barrier that might occur. Therefore, the importance of further research that addresses the success of nurses in carrying out health promotion in primary care.

## References

1. World Health Organization. Ottawa Charter for Health Promotion First International Conference on Health Promotion. Heal Promot. 1986.
2. Kemenkes RI. Kesehatan dalam Kerangka Sustainable Development Goals (SDGs). Rakorpop Kementerian Kesehat RI [Internet]. 2015;(97):24. Available from:[http://www.pusat2.litbang.depkes.go.id/pusat2\\_v1/wp-content/uploads/2015/12/SDGs-Ditjen-BGKIA.pdf](http://www.pusat2.litbang.depkes.go.id/pusat2_v1/wp-content/uploads/2015/12/SDGs-Ditjen-BGKIA.pdf)
3. World Health Organization. Non Communicable Diseases. Progress Monitor 2017. Geneva: World Health Organization. 2017.
4. Adopted O, General I, March A. Noncommunicable Diseases. Egypt: The Team of Officials IFMSA General Assembly. 2018.
5. Lundberg K, Jong MC, Kristiansen L, Jong M. Health Promotion in Practice—District Nurses' Experiences of Working with Health Promotion and Lifestyle Interventions Among Patients at Risk of Developing Cardiovascular Disease. *Explore J Sci Heal* [Internet]. 2017;13(2):108–15. Available from: <http://dx.doi.org/10.1016/j.explore.2016.12.001>

6. Roden J, Jarvis L, Campbell-Crofts S, Whitehead D. Australian rural, remote, and urban community nurses' health promotion role and function. *Health Promot Int.* 2015;
7. Depkes RI. Pedoman peyelenggaraan upaya perawatan kesehatan masyarakat di puskesmas: Keputusan Menteri Kesehatan No. 279 Tahun 2006. 2006.
8. Tafwidhah Y, Nurachmah E, Hariyati RTS. Kompetensi Perawat Puskesmas dan Tingkat Keterlaksanaan Kegiatan Perawatan Kesehatan Masyarakat (Perkesmas). *J Keperawatan Indonesia* [Internet]. 2012;15(1):21–8. Available from: <http://jki.ui.ac.id/index.php/jki/article/view/43/43>
9. Hasson R, Stark AH, Constantini N, Polak R, Verbov G, Edelstein N, et al. “Practice What You Teach” Public Health Nurses Promoting Healthy Lifestyles (PHeeL-PHiNe): Program Evaluation. *J Ambul Care Manage.* 2018;41(3):171–80.
10. Luquis RR, Paz HL. Attitudes About and Practices of Health Promotion and Prevention Among Primary Care Providers. *Health Promot Pract.* 2015;16(5):745–55.
11. Kaufman ND, Rajataramya B, Tanomsingh S, Ronis DL, Potempa K. Nurse preparedness for the non-communicable disease escalation in Thailand: A cross-sectional survey of nurses. *Nurs Heal Sci.* 2012;14(1):32–7.
12. Streubert HJ, Carpenter DR. *Qualitative research in nursing: advancing the humanistic imperative.* Philadelphia, Pa.: Lippincott Williams & Wilkins; 2011.
13. Higgins G, Spencer RL, Kane R. A systematic review of the experiences and perceptions of the newly qualified nurse in the United Kingdom. *Nurse Educ Today.* 2010;
14. Tulder M, Furlan A, Bombardier C, Bouter L, The Editorial Board of the Cochrane Collaboration Back Review Group. Updated Method Guidelines for Systematic Reviews in the Cochrane Collaboration Back Review Group. *Spine (Phila Pa 1976).* 2003;28(12):1290–9.
15. Braun V, Clarke V. Using thematic analysis in psychology., 3:2 (2006), 77-101. *Qual Res Psychol.* 2006;3(2):77-101
16. Runciman P. The health promotion work of the district nurse: interpreting its embeddedness. *Prim Health Care Res Dev* [Internet]. 2014;15(01):15–25. Available from: [http://www.journals.cambridge.org/abstract\\_S1463423612000655](http://www.journals.cambridge.org/abstract_S1463423612000655)
17. Brobeck E, Odenkrants S. Health promotion practice and its implementation in Swedish health care. *Int Nurs ...* [Internet]. 2013;374–80. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/inr.12041/full>
18. Keleher H, Parker R. Health promotion by primary care nurses in Australian general practice. *Collegian.* 2013;
19. Wilhelmsson S, Lindberg M. Health promotion: Facilitators and barriers perceived by district nurses. *Int J Nurs Pract.* 2009;15:156-163.
20. Casey D. Nurses' perceptions, understanding, and experiences of health promotion. *J Clin Nurs.* 2007;16:1039-1049.
21. Jerdén L, Hillervik C, Hansson AC, Flacking R, Weinehall L. Experiences of Swedish community health nurses working with health promotion and a patient-held health record. *Scand J Caring Sci.* 2006;20(4):448–54.
22. Furunes T, Kaltveit A, Akerjordet K. Health-promoting leadership: A qualitative study from experienced nurses' perspective. *J Clin Nurs.* 2018;27:23–24:4290–301.
23. Pamungkas RA, Chmaroonsawasdi K, Vatanasomboon P. A systematic review: family support integrated with diabetes self-management among uncontrolles type II diabetes mellitus. *Behav Sci.* 2017;7(3): 62