RESEARCH ARTICLE

KNOWLEDGE AND ATTITUDE ABOUT SUSTAINABLE DEVELOPMENT GOALS FOR ATTAINMENT OF HEALTH RELATED GOALS AMONG PERIPHERAL HEALTH WORKERS: SYSTEMATIC REVIEW.

Talpada Priyankaben Govindbhai ¹ and Mr.Siddaram Sarate ²

¹. M.Sc Nursing  
2. Assistant Professor, HOD Community Health Nursing  
Affiliation: Manikaka Topawala Institute of Nursing, (A Constituent of Charotar University of Science and Technology), Nadiad-Petlad off highway, Changa-388421, Ta-Petlad, Dist.Anand, Gujarat, India

Manuscript Info

Abstract

Background: Peripheral health workers (PHWs) can play vital roles in increasing cover-age of basic health services. Objectives: To assess the Knowledge and attitude of the PHWs on SDGs for attainment of health related goals. Design: Systematic review and Meta-analysis. Methods: The literature review was systematically searched (pubMed, Medline).from studies were included this give quantitative data about knowledge and attitude for attainment of Health related goals. Results: Average sample size was 982. A pooled analysis of all studies indicated a pooled estimate of mean age 30.42± 5 years. 90% of PHWs have knowledge on general health care; >40 year age have perfect knowledge; average score of PHWs 86.71%; prevention and management (percentage agreement: 34, 20, and 19%, respectively

Conclusions: This paper concludes that Peripheral health workers still do not have adequate knowledge and attitude about different conditions due to various reasons such as the limited resources available etc.

Introduction:-

When the Sustainable Development Goals (SDGs) superseded the Millennium Development Goals (MDGs) in 2015, the United Nations (UN) built on MDG success in meeting the needs of low/middle income countries, and renewed plans for action and change. PHWs at the Periphery areas have to take care of all the basic health needs of the rural population and they become back-bone of the public health delivery system. While SDG 3 aims to ‘ensure healthy lives, and promote well-being for all, at all ages’, this forms only part of a broader health and well-being (WB) brief within the SDGs. (1) These services are: Counselling mothers on maternal and child health issues particularly breast feeding, prevention and treatment of anaemia in pregnancy by providing iron and folic acid supplements to pregnant women, Tetanus immunization, Providing condoms and oral contraceptives, Treating minor illnesses in women and children, and referring patients, Facilitating village health committees and women’s committees to discuss maternal and child health and educational activities They play an important role in post abortion care through identification and referral of women with complications from unsafe abortion. Provides information during a home visit on Nutrition, Hygiene, Family planning, Risks and prevention of common infectious diseases (Bitran, R. 2001) (2)

Corresponding Author: TalpadaPriyankabenGovindbhai.
Aim: To systematically assessed the data related to knowledge and attitude SDGs for attainment of Health related goals among peripheral health workers

Method and materials:-
Eligibility criteria, information sources and search strategy
A systematic literature search was performed in the following electronic reference databases: PubMed/ MEDLINE, IFLA Library, Proquest and IJSR all publications up to March 2018. I had searched term composed of: ‘Knowledge ‘Attitude’, ‘Sustainable development goal’, ‘Peripheral health workers’ for combined text for the complete search strategy the online supplementary data searched. Filters were applied to exclude articles regarding they did not report (or provide) sufficient information about Health related goals and geographical locations other than Asian region. All duplicates were removed using criteria like not relevant to SDGs or MDGs. Restriction based on year of publication (i.e. last 10 year).

Table 1:- Characteristic of study

| AUTHOR                        | STUDY CONDUCTED YEAR | LOCATIOM AND SETTING         | STUDY DESIGN | SAMP SIZE | MEASUREMEN TOOL | RESULT                                                                 |
|-------------------------------|----------------------|-----------------------------|--------------|-----------|----------------|----------------------------------------------------------------------|
| GhanShyam Karol and Dr. B K Pattanaik | 2014                 | Two districts of Rajasthan. Tonk and Jaipur | Evaluative study | 200   | Standardized knowledge test | The knowledge and motivation level of ASHAs in child health care is higher as compared to the maternal health care. |
| Omishakin MYJ                  | 2015                 | Osogbo Local Government Area (OLG) in Osun State | Descriptiv e study | 50     | Self-designed structured questionnaire | Knowledge about family planning; 44% of the respondents know all the family planning methods Attitude towards family planning; Total 50 (100%) 76% of the respondents believed that family planning |
| Study                          | Methodology          | Location                      | Sample Size | Design and Data Collection | Results                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|----------------------|-------------------------------|-------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ofonime Johnson and Ikobong Ekon | Cross-sectional descriptive study | Abak, Akwaibom State, Nigeria | 358         | Interviewer administered semi-structured questionnaire | The most commonly mentioned FP were injectable, 134 (44.8%) and pills, 81 (27.1%) respectively. Up to 114 (33.8%) had a negative attitude towards FP. A total of 143 (42.3%) respondents used a FP method. The commonest were pills, 39 (27.3%) and injectable, 36 (25.2%). Fear of side effect was the most frequently given reason by 89 (45.6%) for non-use of FP. |
| Lodhiya K et al               | Cross-sectional descriptive study | rural areas of Jamnagar district, Gujrat, India | 218         | Pre-tested semistructured in-depth instrument and observation of practice | Out of 218 HW-Fs, only 71.56% were able to enumerate at least 5 criteria of at-risk mothers. |
Selection criteria

Titles and abstracts of 87 sources identified in the various databases were reviewed & identified potentially relevant papers. Study included type of paper that described about role of PHWs in all different disease condition their roles, and ways of working; included studies from any study design and methods, literature that described PHWs working in any aspect of primary or community healthcare and any disease or health issue. Overall included published and unpublished papers reported in English. In contrast, excluded papers not focused on PHWs or papers that focused on PHWs but lacked a definition or description of PHWs. Furthermore, excluded papers that are not reported about SDGs or MDGs.

| Author(s)          | Year | Location/Setting                                                                 | Participants | Data Collection | Knowledge Mean Score | Notes |
|--------------------|------|----------------------------------------------------------------------------------|--------------|-----------------|----------------------|-------|
| Kaistha et al      |      | Regional Health And Family Welfare Training Centre, Chheb, Kangra                 |              | 52              | -                    |       |
| Marta Lomazzi et al| 2012 | 71 countries, covering all WHO regions. We invited all public health professionals and organisations |              | 5,014           | Both quantitative and qualitative data have been collected through the survey (questions used to collect qualitative data) |       |

Only 40.37% & 60% HW-Fs performed HB estimation & urine investigation of mothers. Only 27.98% knew at least 5 of the indications for referral of the mother in labour to higher centre. Knowledge mean score of various thematic areas of participants increased from mean score of 21.9 to 25.4.
Identification Screening

RECORD IDENTIFIED THROUGH DATABASE SEARCHING (N=87)

RECORD SCREENED

STUDY RELATED TO MDGS (N=14)

STUDY RELATED TO SDGS (N=18)

Eligibility

STUDY RELATED KNOWLEDGE AND ATTITUDE (N=6)

STUDY RELATED GENERAL (N=18)

FULL TEXT ARTICLE (N=84)

FULL TEXT ARTICLE EXCLUDED (N=78)

Included

KNOWLEDGE AND ATTITUDE ABOUT SDGS FOR ATTAINMENT OF HEALTH RELATED GOALS AMONG PERIPHERAL HEALTH WORKERS (N=6)

RECORD AFTER DUPLICATES REMOVED (N=18)

NO AVAILABLE DATA ON SDGS AND MDGS

REGION NOT ELIGIBLE

EXCLUDED AFTER FULL TEXT DESIGN DUE TO GEOGRAPHIC RANGE,

POPULATION (PHW), INSUFFICIENT

INFORMATION REGARDING SDGS

NUMBER OF PAPER EXCLUDED DURING TITLE AND ABSTRACT SCREENING: 78

DO NOT PROVIDE SUFFICIENT INFORMATION AND DATA

DO NOT FOCUS ON KNOWLEDGE AND ATTITUDE SDGS FOR ATTAINMENT OF HEALTH RELATED GOAL PHWS

Figure 1: Flow of paper through study

Data collection process and data items:-

For each article, name of the first author, publication year, country and geographical region, that are, two districts of Rajasthan, Osogbo Local Government Area (OLG) in Osun State, Abak, AkwaIbom State, Nigeria, rural areas of Jamnagar district, Gujarat India ,Kangra,71 countries six study design, aim of study, study setting, knowledge and attitude about SDGs outcome, sample size, Status socio demographic and knowledge and attitude about family planning, tuberculosis, MDGs-related activities etc.9,10,11,12,13,14 These themes were adjusted where necessary in the writing process to assure that all determinants fitted within the framework. After review of the full paper, investigators then met to reach consensus on which articles met all inclusion criteria. Initially identified 87 articles that appeared to potentially meet selection criteria based on title and abstract but 69 of these articles were excluded
after full review. The most common reasons for exclusion were study samples that included both SDGs and MDGs related information in general; lack of quantitative data on health-related goals and no sample was available; and absence of an analysis.\textsuperscript{4,5,6,7,8}

**Inclusion and exclusion criteria:**

- **Inclusion criteria:** The studies included are related to the knowledge and attitude about the various aspects of primary health care and particularly Maternal and Child Health Care; various packages of practices: different disease conditions; overall studies on SDGs for attainment of health related goals among PHWs.

- **Exclusion criteria:** A study that did not report (or provide) sufficient information about SDGs or MDGs; not focus on health related goals.

**Results:**

A total of 87 articles were identified through the systematic literature search (See Flow diagram in figure 1); Identified 18 studies were duplicates; remaining 69 titles and abstracts, screened the record and divided into two categories i.e., SDGs and MDGs health-related goals; after screened 20 studies were excluded because not fulfil the criteria of health-related goal finally 63 studies were excluded; including duplicate studies, they did not provide description of PHWs. At last six studies were included for systematic review and meta-analysis as it met the inclusion criteria.\textsuperscript{(15)}

Table 1 summarises the; full detailed list of six included papers and their characteristics are provided.

The studies were from two district of Rajasthan (n=200) Osun State (n=50), Abak, Akwaibom State, Nigeria (n=358), rural areas of Jamnagar district, Gujarat, India (n=218), Chheb, Kangra (n=52) 71 countries (n=5014).\textsuperscript{9,10,11,12,13,14} The total number of PHWs were 5892; Average sample size was 982 (50-5014). A pooled analysis of all studies indicated a Pooled estimate of mean age 30.42±5 years.

The finding of overall six studies Results showed analysis of data knowledge of PHWs on a few general health care practices shows that 90 percent of PHWs have knowledge about different questions asked on general health care; >40 years of age have perfect knowledge about the general health care practices average score of the PHWs in maternal health care is 86.71 percent; Total number of institutional delivery, 71.46 percent have been motivated by PHWs; postnatal care services from the health centres, 74.62 percent have been motivated by the PHWs; 44% of the respondents know all the family planning methods; only 71.56% were able to enumerate at least 5 criteria of at-risk mothers; Only 40.37% & 60% HW-Fs performed HB estimation & urine investigation of mothers; Only 27.98% knew at least 5 of the indications for referral of the mother in labour to a higher centre. MDGs dealing with women, poverty and hunger reduction, disease prevention and management (percentage agreement: 34, 20, and 19%, respectively; in countries with better health indicators environmental challenges have received high attention (percentage agreement 20%).

**Discussion:**

Illustrates the process of study selection, the database searches identified 87 references; from these, removed 18 duplicates. From the remaining 69 titles and abstracts, screened the record in to two categories Sustainable development goal and Millennium Development Goals, 14 were MDGs related study in general and knowledge and attitude related study six excluded as they were did not focus on PHWs. Of the 69 full text papers reviewed, excluded 63 as they did not provide a definition or description of PHWs, leaving 6 included papers. Of the six included papers This review of quantitative studies reporting views of PHWs on knowledge and attitude about SDGs for attainment of health related goals for that included six studies related to reproductive and child health care, MDGs activities, training to health workers, family planning Regular health carers giving attention during follow-up might help improve of community. This is systematic review and meta-analysis to summarize the available data regarding Knowledge and attitude about SDGs for attainment of health related goals. The average sample size 982; the mean age of participants in the included study was 30.42±5 years on SDGs and MDGs for attainment of health related goals among PHWs, indicated that knowledge and attitude among PHWs in child health care is higher as compared to the maternal health care; showed that not all the health care providers were knowledgeable about family planning methods. Less than half of the respondents knew about all the methods of family planning. Many of them were not aware of the recent methods of family planning like contraceptive patch, vaginal ring, implants and emergency contraceptive. Knowledge and skills grossly lacking in many basic health care components. Negligence
in essential health care practices was detected. The MDGs will not be fully achieved due to various reasons such as the limited resources available, lack of services, and trained workforce or lack of coordination. Moreover, a single MDG will most possibly not be achieved in a country where all remaining MDGs have not been reached. (4, 5, 6, 7, 8)

Conclusion:-
This paper concludes that PHWs some health care providers still do not have adequate knowledge on family planning methods especially the emergency contraceptives and newer hormonal contraceptives (vaginal ring and implants). Some PHWs Knowledge and motivation level in child health care is higher as compared to the maternal health care. The MDGs will not be fully achieved due to various reasons such as the limited resources available, lack of services, and trained workforce or lack of coordination. Moreover, a single MDG will most possibly not be achieved in a country where all remaining MDGs have not been reached.

Implications for nursing practice
For many of the included studies the knowledge and attitude about SDGs Although one of the primary responsibilities of PHWs is to meet the needs of women and men in their community, the vast majority of PHWs reported caring for pregnant women, promoting institutional delivery and immunization, and conducting household visits as their main activities. Strong studies tended to focus on well-defined the responsibilities of peripheral health workers. found that appropriate understanding and awareness of different disease are considered essential components before taking any informed action for the prevention and treatment of disease. The study also revealed that factors influence with (age, education), distance to access/utilise health services, and perceptions of the healthcare expected from health services have been identified as major determinants that influence people's health-seeking behaviours, as has been clearly documented in other studies (4, 5, 6, 7, 8).

Reference:-
1. United Nations. Millennium Summit of the United Nations. (Document on the internet) 2000(cited 2017June 10). Available from: http://www.un.org/en/development/developmentagenda/millennium.shtml
2. Bitran, R. Disease control in priorities in developing country. (Document on the internet). 2001(cited 2017 June 11) Available from: https://books.google.co.in/books?
3. Tessa Heestermans, Joyce L Browne, Susan C Aitken, Sigrid C Vervoort, Kerstin Klipstein-Grobusch. Determinants of adherence to antiretroviral therapy among HIV-positive adults in sub-Saharan Africa: a systematic review. BMJ Global health. (Document on the internet) (Cited 2018 March 9). Available from: http://gh.bmj.com/content/1/4/e000125
4. Abimbola Olaniran, Helen Smith, Regine Unkels, Sarah Bar-Zeev & Nynke van den Broek. Who is a community health worker? – a systematic review of definitions. Abstracts. Global Health Action. (Cited 2018 February 2). Available from: https://doi.org/10.1080/16549716.2017.1272223
5. Chad A. Leaver & Gordon Bargh & James R. Dunn & Stephen W. Hwang. The Effects of Housing Status on Health-Related Outcomes in People living with HIV: A Systematic Review of the Literature. for reference of introductory part. (Document on the internet) (Cited 2018 February 2). Available from: https://www.aidschicago.org/resources/legacy/pdf/2008/housing_plan_EffectsHousingStatus.pdf
6. Sharada P. Wasti & Edwin van Teijlingen, Padam Simkhada, Julian Randall, Susan Baxter & et.al. Factors influencing adherence to antiretroviral treatment in Asian developing countries: a systematic review. Discussion part. (Document on the internet) (Cited 2018 February 2). Available from: https://www.ncbi.nlm.nih.gov/pubmed/21967241
7. Jean B. Nachega, Olalekan A. Uthman, Jean Anderson, Karl Peltzer, Sarah Wampold & et. al. Adherence to Antiretroviral Therapy During and After Pregnancy in Low-, Middle and High Income Countries: A Systematic Review and Meta-Analysis. (Document on the internet) (Cited 2018 March 9). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5061936/
8. Krishna Regmi, Anju Kunwar and Leonard Ortega. Systematic review of knowledge, attitudes and beliefs about malaria among the South Asian population. (Document on the internet) (Cited 2018 February 2). Available from: https://www.ncbi.nlm.nih.gov/pubmed/2714198
9. Ghan Shyam Karol. Community Health Workers and Reproductive and Child Health Care: An Evaluative Study on Knowledge and Motivation of Community workers. Workers in Rajasthan. International Journal of Humanities and Social Science. Vol.4, No. 9; July 2014
10. Madhvi Kaitha, Tarun Sharma, Vikram Katooch, Urmil Kapoor. Outcome of RMNCH training of female health workers at regional health and family welfare training centre in northern part of India International Journal of Community Medicine and Public Health |
11. Kaushik Lodhiya, Pradeep Pithadiya, Raman Damor, Sumit Unadkat, Sudha Yadav. A study on knowledge and skills of female health workers regarding maternal care under RCH programme. (Document on the internet) (Cited 2017 June 13). Available from: http://njamindia.org/uploads/3-1_35-39.pdf

12. Marts Lomazzi, Mareike Theisling – MDGs: A public health professional’s perspective from 71 countries, Journal of public health policy, JCR science edition, (2013) 34, e1-e22. Doi:10.1057/jphp.2012.69

13. Monisola Y. J. Omishakin. Knowledge, Attitude and Practice of Family Planning among Healthcare Providers in Two Selected Health Centres in Osogbo Local Government, Osun State (Document on the internet) (Cited 2018 March 8). Available from: http://scientonline.org/fulltext/knowledge-attitude-and-practice-of-family-planning-among-healthcare-providers-in-two-selected-health-centres-in-osogbo-local-government-osun-state/21171

14. Ofonime Johnson and Ikobong Ekong. Knowledge, Attitude and Practice of Family Planning among Women in a Rural Community in Southern Nigeria. British Journal of Medicine & Medical Research 12(2): 1-8, 2016, Article no.BJMMR.21840, (Document on the internet) (Cited 2018 March 8). Available from: https://www.researchgate.net/publication/28380071_Knowledge_Attitude_and_Practice_of_Family_Planning_among_Women_in_a_Rural_Community_in_Southern_Nigeria

15. Suzanne M Skevington, Tracy Epton. Flow of papers through the study. QoL, quality of life. BMJ Global health. (Document on the internet) (Cited 2018 February 2). Available from: http://gh.bmj.com/content/3/Suppl_1/e000609