Physiotherapy Awareness Among Community Health workers-A Survey

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Abstract — Objective: There are many researches on awareness of physiotherapy among medical practitioners but fewer researches on community health workers (CHWs). By this survey knew about awareness in CHWs which play important role in gynecological and pediatrics problems. The aim of the study to assessed awareness of physiotherapy among community health workers. Materials and Methods: The design of the study was cross-sectional and non-probability convenience sampling was used for data collection. Sample size consisted of 150 participants from CHWs in Karachi. Study was conducted from August 2017 to November 2017. CHWs include community health aids, country specific occupational title such as community health officers, community health education workers and lady health visitors. The exclusion criteria include Physiotherapists, Doctors, Nurses and Technicians. Respondents have filled questionnaires, each answer has been coded and frequency was analyzed. Descriptive statistics was used and data analyze on IBM SPSS version 22.0. Results: The mean age of participants was 31.54 years. In our study classification of gender 88% were female and 12% were male. 52% of participants were aware about physiotherapy and 48% were not. Conclusion: There is only some awareness about physiotherapy among CHWs. There is mostly no source of awareness to provide information related to physiotherapy.

Index Terms— Physiotherapy, Awareness, Community health workers.

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1 Introduction

hysiotherapy has been defined as a forceful health care profession with well-known theoretical and extensive clinical application in the presentation, development and restoration of optimal physical functions."[1]"Physiotherapy is one of the oldest profession in health care practiced since 460 BC by great physicians such as Hippocrates and Galen. [2] Rehabilitation practitioners i.e. physiotherapists are involved in assessment, diagnosis, evaluation management and prevention of the dysfunction and impairments of movement in people of all ages and within a wide-range of contexts. It is the role of physiotherapists to help disabled people to maximize their potential capabilities of achieving function and independence of activities of daily living. The better is the survival of profession the more accessibility a physiotherapist is to patients. Physiotherapists are the top of the pyramid of the health care practitioners [1]

Physiotherapists are professionals and have knowledge, autonomy, authority, education, responsibility, accountability and ethics. [3] Physiotherapists want to used their knowledge, skills and attributes to benefit people for example elite athletes, older people, patients with developmental or acquired conditions. [4] Physical therapy is given to individuals who have impairments or improve overall fitness to reduce risk of injury. [5]

The physiotherapists facilitate to community for optimum functional independence, health and well-being. Health and well-being of the community is achieved by specialized manual techniques, electrotherapeutic modalities, exercises, advice and counseling to patients and caregivers, provision of adaptive devices and mobility aids, education and training. [6]

Physiotherapy is shared with medical practitioner and based on scientific philosophy. Physiotherapy requires specializations in various fields for the benefit of the society and physiotherapy as a profession is an occupation. Physiotherapy has reached higher position because of the education system, research and widespread practice. [1]

In all ages of group physiotherapists are health care professionals who maintain, restore and improve movement, activity and health for individuals in all ages groups. In some continents, they are addressed as Physiotherapist and in other continents as physical Therapists. [7] Even in very high, medium and low developing areas there is lack of complete understanding of physiotherapy profession. There is negative perception about physiotherapy profession that physiotherapy profession mostly deals with exercise and massage. Physiotherapy as a key component in health care system. In health promotion and prevention of diseases the role of physiotherapy is still growing. [4] Awareness about physiotherapy is necessary not only for assessment, diagnosis, evaluation, management and prevention but also for making one's future career choice. When making one's future career choice information about various occupations and profession is an important factor. [8] Pakistan is one of the world's most populated country in which the morbidity and mortality rates are very high mainly due to child marriage, lack of education, especially among the lower socioeconomic groups. Many researchers have found community rehabilitation treatment to be more effective in treating community than institutionalized treatment. One major advantage of community based rehabilitation programs (CBR) culture sensitivities are taken into consideration over institutionalized rehabilitation. Physiotherapists undergo rigorous training in treatment strategies to help the community, especially persons with structural and functional disabilities. Physiotherapistsare essential to CBR. [9] Physiotherapy encompasses emotional, social, physical and

psychological well-being. Physiotherapistinvolve the interaction between the patients/clients, families, caregivers i.e. nursing staff, other health care professionals i.e doctors or communities in a process where movement is assessed, goals are achieved, using knowledge and skills related to physiotherapists. In spite of physiotherapy advances and excellent results in delivering quality health care, but there is lack of awareness of physiotherapy among health care professional like medical practitioners and general population. [2] According to American Public Association, "A CHW is a frontline public health worker who is trusted member of community served. [10] CHWs also known as promotors or patient guides, have received considerable attention for their potential to improve access to and the quality of healthcare. [11] CHWs as a part of a comprehensive, multi-level strategy to address racial and ethnic disparities in health care, stating that CHWs work as a community based resource to increase racial and ethnic minorities access to health care and to serve as a liaison between health care providers and communities they serve. [12]

CHWs are nonprofessional members of community who work as volunteers or association in local health care system in both urban and rural environments.[13] CHWs work in two different settings either in health care or social service sectors to meet the unique needs of their communities.[14] CHWs are effective at helping patient manage their chronic disease.[15] Health care providers are partnering with CHWs to help individuals navigate a complex health care system, receive primary and preventive care, maintain healthy behaviors and manage chronic conditions.[16] Interest in CHW programmes in low and middle income countries become more prominent in the 1990s promoted by the AIDS (Acquired Immune Deficiency Syndrome) epidemic and the failure of the formal health system to provide adequate care for people with chronic illnesses such as cancer, epilepsy and mental illness. [17] The CHWs also play an important role in the care of people with hypertension. [18] CHWs are now part of the interdisciplinary work teams for home health and family health. [19]

CHWs are members who are chosen by community members or organizations to provide basic health and medical care to their community capable of providing preventive, promotional and rehabilitation care to these communities. [20]

Following are the roles of CHWs:

- CHWs creating connections between vulnerable populations and health care systems.
- It facilitates health care and social service system navigation.
- It manages care and transitions for vulnerable populations

- It determines eligibility and enrolling individuals into health insurance plans.
- It educates health system providers and stakeholders about community health needs.

2 MATERIALS AND METHOD

2.1 Research design

The design of the study was cross-sectional observational survey.

2.2 Sample size

Sample size consisted of 150 participants from CHWs.

2.3 Sampling technique

The target population was CHWs from Pakistan and accessible population was from Karachi. Participants were selected through non-probability convenient sampling.

2.4 Inclusion criteria

CHWs include community health aids, country specific occupational title such as community health officers, community health education workers and lady health visitors.

2.5 Exclusion criteria

Physiotherapist, Doctors, Nurses and Technicians.

2.6 Research instrument/tool

Adopted a tool from previous researcher on awareness of physiotherapy among Anganwadi Workers. ⁽⁶⁾ In our research the purpose of questionnaire was to check awareness of physiotherapy among CHWs. The questionnaire contained three sections in which both closed and open ended questions were present.

Section 1 required background information and consist of 9 questions that include age, gender, educational qualification, job designation, working location, population covered, when and where training was given, duration of training and work experience (no. of years).

Section 2 required the details on the source of information about physiotherapy services and consist of 4 questions.

Section 3 required awareness about the various physiotherapy services and consist of 9 questions.

Questionnaire response on nominal level of measurement.

2.7 Procedure

After the approval of letter from Institutional Review Board (IRB) I approach to the participants and took consent from participants then meet inclusion and exclusion criteria and self-administered questionnaires were distributed among community health workers. The questionnaire was completed within 10 minutes.

2.8 Data analysis

The participants had filled questionnaire in one or more words, each answer has been coded and frequency was ana-

lyzed. Descriptive statistics was used and data analyze on IBM SPSS version 22.0.

2.9 Ethical approval

Permission of data collection was taken from Institutional Review Board(IRB) of Jinnah postgraduate Medical centre (IPMC).

3 RESULTS

The analyzed data showed that participants age with mean age and standard deviation of 31.54±8.74 years. Highest frequency of participants with matric which was overall 41.3% and lowest frequency of BS, B.Ed. which was overall 2.7% as shown in table 1. The highest frequency of training durationwas 67 which was overall (44.7%). This showed that most participants have 1-day training duration. The lowest frequency was 1 which was overall (0.7%) which showed that least participants have 9 days training duration as shown in table 1. Fifty-two percent participants were aware about physiotherapy and fourt eight percent were not. Most of the CHWs answer that they have no source of awareness (personal contacts) with frequency of 59 which was overall (39.3%). The source of information family/friend member with frequency 31 which was overall (20.7%) provide information about physiotherapy. second leading source of information cian/doctors/medical professionals with frequency 34 which was overall (22.7%), hospital/health center with frequency 23 which was overall (15.3%) and camps/campaign with frequency 3 which was overall (2%) provide source of information.

The analyzed data for source of information about (mass media) majority of the CHWs said that they have no source of awareness about physiotherapy with frequency 113 which was overall (75.3%). Newspaper was the source of awareness with frequency 10 which was overall (6.7%), books/magazines with frequency 7 which was overall (4.7%), radio/television with frequency 16 which was overall (10.7%) and other like internet with frequency 4 which was overall (2.7%) provide source of information about physiotherapy. Majority of the CHWs were not informed about physiotherapy during training period, majority of the CHWs were interested to learn about physiotherapy and most of the CHWs were not referred patient for physiotherapy as shown in table 1. Conditions that refer a patient to a physiotherapist and conditions that not refer a patient to a physiotherapist as shown in figure 1. The analyzed data showed that age criteria for reference for physiotherapy was that 50.7% of the CHWs agree that all age groups can be treated. Out of the responses received, 30.7% if the CHWs admit that they don't know which age groups of people can be treated by a physiotherapist. 18.7% answer that different age groups can be treated. 49.3% of the CHWs were aware of the nearest physiotherapy center in their locality. Thirty-six percent don't know if there are any centers for physiotherapy nearby or in their locality. 14.7% of the respondents say that there is no physiotherapy in their locality.

4 DISCUSSION

The study was carried out to find the awareness of physiotherapy among community health workers. The 170 questionnaires were distributed to 8 community offices in Pakistan and out of 170 questionnaires 20 questionnaires were returned back, the response rate 88.23%. A main feature of the study was that the questions were asked as open ended questions by which respondents express their views freely. According to this survey there is moderate awareness of physiotherapy among community health workers. Mostly CHWs do not refer any cases for physiotherapy despite many were interested to learn about physiotherapy. The reason is that CHWs were not provided any information regarding physiotherapy during their training period. Most of the CHWs had no source of awareness in personal contacts, the lowest awareness provided by camps/campaign and the analysis also showed that mostly CHWs have no source of awareness in mass media with lowest awareness provided by internet despite having a mean experience 2.85 years working in community health workers. The awareness will improve through training duration will greater than 1 day and provide adequate knowledge during their training period about physiotherapy. A similar study conducted by Devanshi et al. (2017) there was high awareness about physiotherapy and its referral of healthcare professional and majority of general population knew about physiotherapy. [2]

The awareness will improve via mass media will help to provide greater awareness about physiotherapy. Similar to our study which was conducted thru **Rahul et al. (2013)** 43% of the medical doctors have inadequate knowledge about physiotherapy this may be due to there was a single physiotherapy school in whole country and lack of awareness and knowledge in medical doctors about physiotherapy. [21]

Mostly of community health workers don't knew about which patient should refer to physiotherapy. The awareness will improve through seminars conducted related to physiotherapy profession and community health workers invite in it. Similar to our study was conducted through **Acharya et al. (2011)** which showed that majority were acceptable awareness of physiotherapy profession and many of doctors reported to have physiotherapy services in their hospital. Referral to physiotherapy was found to be high. [9]

According to this survey low percentage of community health workers refer patient to physiotherapist. A study conducted via **Apurv et al. (2014)** a cross-sectional survey to study awareness and perspective among referring doctors in colleges of Mumbai which found that a significant number of doctors were acquainted with the PT working with them. They also found that majority of doctors from their study (95.5%) referred people for physiotherapy. [22]

Similar to our study conducted in **Saudi Arabia**, 75% of respondents having some knowledge of physiotherapy, very small number of respondents referred patients to physiotherapy departments. [23] When relate to our study mostly community health workers know about for which conditions refer patients for physiotherapy.

5 CONCLUSION

There is only some awareness about physiotherapy among CHWs. There is mostly no source of awareness to provide information related to physiotherapy. Provide adequate education about physiotherapy during their training period. Aware all CHWs by personal contacts and mass media enhance awareness and accessibility for healthcare. Deliver education about physiotherapy necessity in gynecological and pediatric conditions. Invite CHWs in seminars and arrange workshops for them to provide information regarding physiotherapy. The study conduct on educated participants.

6 Recommendations

The recommendations are as follows:

- It will be better to conduct this research on large sample size.
- There will be include higher educated participants in CHWs.
- Training duration should be more than 1 day and provide adequate knowledge about physiotherapy in pediatrics and gynecological problems, because CHWs deal with their health related problems.
- Mass media will help to provide greater awareness about physiotherapy

	n	%
1.Educational qualification		
Middle	11	7.3
Matric	62	41.3
Inter	40	26.7
Graduation	27	18
B. Ed	4	2.7
Masters	6	4
2.Duration of training		
1 day	67	44.7
2 days	67	44.7
3 days	11	7.3
6 days	2	1.3
7 days	1	0.7
8 days	1	0.7
9 days	1	0.7
3.Informed about physio-		
therapy	14	9.3
Yes	136	90.7
No		
4.Interested to learn		
Yes	124	17.3
No	26	82.7
5.Referred to physiothera-		
py in your locality		
Yes	49	32.7
No	101	67.3

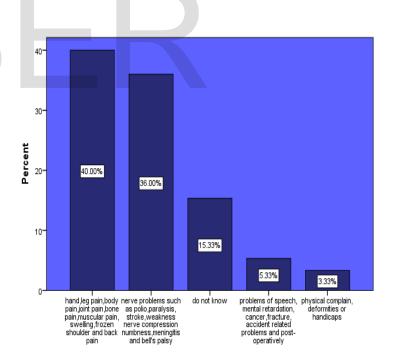


Figure.1. Conditions refer a patient to a physiotherapist

TABLE 1

KNOWLWDGE AND INFORMATION ABOUT PHYSIOTHER-APY SERVICES

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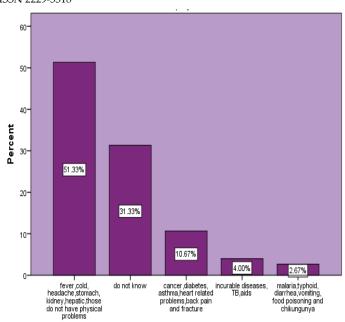


Figure. 2.Conditions that not refer a patient to a physiotherapist

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REFERENCES

- [1] Shete Dhiraj, Thipse Jayant, Kolase Reshma, Awareness of physiotherapy in medical and non-medical practitioners at rural area." American journal of advances in medical science" 1, no. 1 (2015).
- [2] Doshi Devanshi, Jiandani Mariya, Gadgil Rucha, Shetty Neha, Physiotherapy awareness among medical and non-medical population."Internationl journal of physiotherapy and research" (2017).
- [3] Marilyn M. Professionalism.: Linda M; 2005.
- [4] Tidy. Tidy's physiotherapy, 14th edition ed.
- [5] Carolyn K,Lynn C. Therapeutic exercise(Foundation and Technique), Sixth edition ed.
- [6] Johnsey, Tania, Narasimman Swaminathan, Sydney Rebello, and Kavitha Vishal. "Awareness of physiotherapy among the Anganwadi workers in Dakshina Kannada: A survey." Muller Journal of Medical Sciences and Research 4, no. 2 (2013): 57.
- [7] Paul, Anila, and Rajani Mullerpatan. "Review of physiotherapy awareness across the globe." *International Journal of Health Sciences and Research (IJHSR)* 5, no. 10 (2015): 294-301.
- [8] Ogiwara, Shimpachiro, and Masafumi Nozoe. "Knowledge of physiotherapy: a study of Ishikawa high school students." *Journal of Physical Therapy Science* 17, no. 1 (2005): 9-16.
- [9] Rajan, Pavithra. "Physiotherapy Students' Awareness of Community Health in India." Disability, CBR & Inclusive Development 28, no. 1 (2017): 207-218.
- [10] Boston. Community health worker opportunities and the affordable care act(ACA).

- [11] Sara MC, Kara G, Malia M, Emily. An assessment of the role of CHWs in Utah and the national health care system. *Center for public policy and administration*; ()
- [12] Ana AC,Nell B,Lemyra D,Rita DK,Gwen H,Jane K "et al". CDC's division of diabetes translation community health workers/promotors de salud: Critical connections in communities. ; (): 4.
- [13] Role of community health workers. http://www.nhlbi.nih.gov/health/educational/healthdisp/role-of-community-health-workers.htm (accessed).
- [14] Role of community health workers. http://www.ruralhealthinfo.org/community-health/community-health-workers/1/roles (accessed).
- [15] Alenjandroperez. Making insurance exchanges successful: The role of community health workers. http://tcf.org/content/commentary/making-insurance-exchangessuccessful-the-role-of-community-health-workers (accessed June19,2013).
- [16] Kristine G,Laura T. Community health workers expanding the scope of the health care delivery system. *National conference of state legislatures* April 2008; (): 1.
- [17] Simon L, Judy D, Philip P, Merrick Z, Godwin NA, Brian EVW et al.. Lady health workers in primary and community health care. *Cochrane collaboration* 2005; ():.
- [18] Nell B, Dawn SRN. Effectiveness of community health workers in the care of people with hypertension. American journal of preventive medicine 2007; 32(5): .
- [19] The vital role of the community health worker. http://www.mvna.org/about/knowledge-center/community-health-workers (accessed 2017).
- [20] Haines, witmer, rahman. community health worker. http://en.m.wikipedia.org (accessed Google).
- [21] Kutty, R. K., H. Gebremichael, and S. Vargehese. "Knowledge, attitude, practice and associated factors of physiotherapy among medical doctors in Tigray, Northern Ethiopia: a cross sectional study." GJBAHS 2 (2013): 74-81.
- [22] Shimpi, Apurv, Hutoxi Writer, Ashok Shyam, and Rachana Dabadghav. "Role of physiotherapy in India–A cross-sectional survey to study the awareness and perspective among referring doctors." *Journal of Medical Thesis* 2, no. 2 (2014): 18-22.
- [23] Al-Eisa, Einas S., Hind Al-Hoqail, Asma S. Al-Rushud, Azhar Al-Harthi, Banan Al-Mass, Bashayer M. Al-Harbi, Sara Al-Azzaz, Ahmad H. Alghadir, and Zaheen A. Iqbal. "Awareness, perceptions and beliefs about physiotherapy held by physicians working in Saudi Arabia: a cross-sectional study." *Journal of physical therapy science* 28, no. 12 (2016): 3435-3439.