

Awareness of the Ward Based Outreach Team and the services offered by the programme in the Tshwane health district, South Africa

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Background: The Ward Based Outreach Team (WBOT) is an organised team approach to a healthcare system based on the principles of epidemiology, primary health care, preventive medicine and health promotion. Globally, it has become a primary care response to many health challenges such as universal health coverage. The beneficiaries are community members, also referred to as households.

Methods: The study assessed the awareness of the WBOT and the services offered by the programme in the Tshwane health district of South Africa. This was a cross-sectional survey conducted in all seven sub-districts of the health district. The health district is further sub-divided into 150 health wards. Eighty-five health wards were randomly selected for the study. Using the sample size calculator, with a confidence interval of 5% and confidence level of 99%, the sample size of participants was 654. However, during the data collection process there was over-sampling of up to 764. Participants were recruited by convenience sampling. Data were collected between October 12 and December 3, 2015, using a pre-piloted, structured questionnaire administered by 14 trained field workers.

Results: The study obtained 6 288 responses from the 764 participants. The responses were grouped into two sections, 'Yes' and 'No'. A summary of the responses showed that the number of 'yes' responses, the number of participants who were aware of the WBOT and the services offered by the programme were higher than the number of participants who were unaware of the programme. The figures were 5 590 (88.8%) 'yes' responses and 698 (11.1%) 'no' responses.

Conclusion: In summary, the awareness of the WBOT and the services offered by the programme in the Tshwane health district, South Africa is evaluated to be 88.8%.

Keywords: community awareness, Tshwane health district, WBOT

Background

The literature reveals that the Ward Based Outreach Team (WBOT) programme originated in the 1940s. Two medical doctors, Sidney Kark and Emily Kark, in Pholela—in the KwaZulu Natal province of South Africa—organised the first health system that systematically linked the health provider and the health user. A health team could make several home visits to allow better integration of the healthcare system into communities. This system did not last long, perhaps because of a lack of support. Many countries worldwide use the same approach in order to solve their primary health care challenges and claim to be the innovators of the programme.¹ Considering the global challenges in terms of universal health coverage, the WBOT programme has been utilised by certain countries as a response to various health challenges.

WBOT is an organised team approach to a healthcare system built on the principles of epidemiology, primary care, preventive medicine and health promotion.² In South Africa, the programme targets the smallest political municipalities, called wards. Since health care was taken to and provided at home or in communities as preventative, promotive, curative, palliative and rehabilitative services; the beneficiaries were community members, also referred to as households.³

The efficiency of the programme rests on the level of collaboration and participation of the recipients. Therefore, awareness of the programme in communities or households remains vital.

A programme similar to the WBOT was implemented in the Cuban healthcare system and was a success. Although the economic development of Cuba presents some serious challenges, the health image of the nation can be exemplary to family physicians in other countries such as the United States. In 2005, the amount of gross national product (GNP) spent on the healthcare system in Cuba was up to 6.2% less than the amount spent in the United States.⁴ Although Cuba spent less GNP on its healthcare system than other countries, its healthcare system remains a good model in the world. Cuban doctors and nurses spent their mornings in the clinics, and their afternoons were reserved for home visits to patients with acute or chronic needs as well as prevention needs.⁴

A similar programme was implemented in Spain. However, Community Oriented Primary Care (COPC), as it is referred to in other countries, including Spain, was connected to family medicine. This programme faces limitations such as the absence of support: lack of subsidy from the government in place, as well as lack of motivation and participation from other health professionals. Despite these challenges, the programme is still vigorous in urban areas such as Barcelona.⁵

In 2000, Nigeria established the Ward Health Service (WHS) as an initiative to revitalise its primary health care system. Among its objectives was to find out the factors associated with different gaps that might be encountered during full initiation of the project. This phase, also named the preparation phase, revealed

that scarcity of stakeholders in the primary health care system was the reason why the system did not improve.⁶

The WBOT approach has been defined as a strong partnership that should tie the healthcare provider with the community. It paves the way to an amelioration of the health conditions of the communities concerned and an improvement in the primary health care system in South Africa. The WBOT approach strives to strengthen and re-engineer the primary health care system in that country.⁷ South Africa and other countries, such as China, India and Brazil, contain half of the world's population. The World Health Organization (WHO) recommended that these four countries have to consider developing their primary health care systems in order to reach successful coverage. Preparing or training students who are still in an undergraduate programme in primary health care will enable these countries to reach the target of successful coverage.⁸

Among the few studies that have targeted the beneficiaries of the programme in South Africa, a good outcome came from work done by Lindiwe and Mosa (2017), in KwaZulu-Natal. The services of WBOT were admired and a recommendation was made in the direction of extending these services in order to accommodate community health needs.⁹

Considering the scarcity of the WBOT literature focused on communities or households, this study revolved around the awareness of communities or households regarding the WBOT programme, in the Tshwane health district of South Africa.

Methods

Study design and sampling area

This was a cross-sectional study conducted in the seven sub-districts of the Tshwane health district of South Africa. From 105 health wards in the Tshwane health district, 85 were randomly selected.

Study population and sampling procedure

According to the Tshwane stats SA 2015, the city of Tshwane had three million households. It has many clinics that constitute the primary health care system. The district initiated the WBOT programme with 39 teams on November 3, 2015. The estimated number of households was approximately 36 000. The sample size was calculated using the sample size calculator and was 654 (CL 99% and CI 5%).¹⁰ All household members aged 18 years and older found in the house during the survey and willing to participate were included in the sample. This resulted in an over-sampling and totalled 764 rather than 654.

Data collection

The principal researcher conducted one-day training for the 14 field workers who collected the data. They went to different registered houses, using a structured questionnaire that had been previously piloted in a few clinics. These clinics did not form part of the sample. The pilot study resulted in appropriate modification of the questionnaire used, in order to achieve the aim of the study. The research team designed the questionnaire in English and research team members confident in isiZulu and Setswana translated the questionnaire into these two languages, which are the most spoken languages in the city of Tshwane. Trained field workers collected data from the October 12 until November 3, 2015.

Data analysis

Data were captured on an Excel® spreadsheet (Microsoft Corp, Redmond, WA, USA) and imported to SAS® software version 9.2 (SAS Institute, Cary, NC, USA) for analysis. With the assistance of a statistician, descriptive statistics were compiled to determine mean, median, mode and standard deviation for the variables. Bivariate analyses for dependent and independent variables were done using Pearson's chi-square test with a *p*-value of < 0.05 considered statistically significant. The results were presented in the form of frequencies and tables.

Results

The study obtained 6 288 responses from the 764 participants. The responses were grouped into two sections, 'Yes' and 'No'. A summary of the responses showed that the number of 'yes' responses, the number of participants who were aware of the WBOT and the services offered by the programme was higher than the number of participants who were unaware of the programme. The figures were 5 590 (88.8%) 'yes' responses and 698 (11.1%) 'no' responses (Table 1).

Considering the eight questions on awareness of the WBOT and the services offered by the programme in Tshwane health district, 6 280 responses were obtained from the households. There were 5 590 (88.8%) 'yes' responses and 698 (11.1%) 'no' responses. The 'yes' responses confirmed awareness and 'no' responses denied awareness of the programme. On the one hand, 728 (95.92%) households had heard about the programme; on the other hand, 677 (88.73%) households were aware that Community Health Workers (CHWs) can attend to minor ailments. Furthermore, 685 (89.78%) of the households were aware that the CHWs can offer first aid, and 670 (87.81%) of the households were aware that CHWs can promote the health of a child, an adolescent and an adult. Moreover, 714 (93.58%) of the households were aware that CHWs can promote health information and education in the community. In addition, 702 (92.13%) of the households were aware that CHWs offer psychological support; concurrently, 689 (90.42%) of the households were aware that CHWs can do ante-natal and post-natal care. Finally, 725 (95.14%) of the households were aware that CHWs can screen for early detection of and intervention in health problems and illnesses (Tables 2 and 3).

Discussion

In the United States, the COPC programme found support in the public health services rendered by community health centres.

Table 1: Baseline characteristics (gender, breadwinner, employed, pension and distance between house and clinic)

Gender <i>n</i> = 764	Male 199 (26.05%)	Female 565 (73.95%)
Breadwinner <i>n</i> = 761	Yes 508 (67.80%)	No 253 (33.20%)
Employed <i>n</i> = 764	Yes 78 (10.20%)	No 686 (89.80%)
Pension <i>n</i> = 762	Yes 388 (50.92%)	No 374 (49.08%)
Distance between clinics and households' houses <i>n</i> = 764	Less than 5 km 510 (66.66%)	= or > 5 km 254 (33.13%)

Table 2: Awareness of WBOT

Awareness of WBOT	Yes	No
Have you heard of WBOT? (n = 764)	728 (95.92%)	36 (4.71%)
Are you aware that WBOT members (CHWs) can treat minor ailments? (n = 763)	677 (88.73%)	86 (11.27%)
Are you aware that WBOT members (CHWs) can offer First Aid and emergency help? (n = 763)	685 (89.78%)	78 (10.22%)
Are you aware that WBOT members (CHWs) promote health of the child, adolescent and adults? (n = 763)	670 (87.81%)	93 (12.19%)
Are you aware that WBOT members (CHWs) provide health information and education to the community? (n = 763)	714 (93.58%)	49 (6.42%)
Are you aware that WBOT members (CHWs) offer psychosocial support such as counselling and advice? (n = 762)	702 (92.13%)	60 (7.87)
Are you aware that WBOT members (CHWs) do ante- and postnatal support in order to reduce maternal mortality? (n = 762)	689 (90.42%)	73 (9.58%)
Are you aware that WBOT members screen for early detection of and intervention in health problems and illnesses? (n = 762)	725 (95.14%)	37 (4.85%)

Around Mississippi, there was an emergence of community organisations that worked with different health centres to increase the awareness of community problems through health education and environmental programmes. This community awareness assisted the community health centres in terms of products to be delivered. Hospitals in Dallas used the principles of this programme to direct their service delivery into communities, based on awareness of the programme by the community.¹¹ Many countries worldwide have incorporated the principles of COPC in the training of their family physicians. In Cuba, for instance, COPC is part of the duties of a family physician. A family physician is even included in the healthcare team that looks at 6–8 000 people within the same community; the physician pairs with nurses and other health workers while visiting households. These visits have established a strong relationship between the healthcare workers and households, since households are aware of the programme's dividends. This community awareness strengthened the programme.¹¹

In South Africa, the issue of community involvement has been raised by certain authors. They are of the opinion that this

involvement remains a fundamental constituent when applying the WBOT. The provider will be able to answer certain questions related to a particular community only by involving the community concerned; this further corroborates community awareness being essential to such programmes. By increasing awareness of the WBOT and the services offered by the programme in Tshwane, the health provider is also empowering the community to influence its own changes.¹²

In KwaZulu-Natal, South Africa, Lindiwe and Mosa (2017), through a quality study, assessed the community awareness perception of WBOT as well as enthusiasm for using the programme. They noted during their interviews that respondents expressed their gratitude that the programme has reduced the distance between the health facilities and their homes,⁹ because health care was brought to their homes.^{3,9} Respondents also admired the fact that patients with chronic diseases received their medication at home through the programme and would love to see community health workers bringing with them basic medications such as vitamins.⁹ In the North West province of South Africa, an assessment prior to initiation of the programme was undertaken. This assessment described elements of initiation that can facilitate the process and also ground the programme in the province. A few strategies such as sufficient financing, communication and dialogue as well as governance were put in place to avoid failure.¹³

Strengths and limitations

This study used primary data collected from Tshwane households and captured in the questionnaire. The questionnaire was piloted in an area that was not part of the study sample.

The study findings are, to some extent, hindered by certain limitations. Numerous reasons, such as limited resources and geographical issues relating to distance, determined that the study could not include all 150 Tshwane wards. The wards considered were those that already had the WBOT programme running. Lastly, for similar reasons, the study could not consider all the households in the wards.

Conclusion and recommendations

This study assessed awareness of the WBOT and the services offered by the programme in Tshwane health district, South Africa. From 764 participants, the findings revealed that 5 590 (88.8%) of the participants' answers were positive regarding awareness of the programme whereas 698 (11.1%) of the participants were unaware of the programme. Therefore, it can be said

Table 3: Comparison of baseline characteristics with awareness of WBOT

Baseline characteristics	Dichotomous variables	Frequencies	Mean percentage awareness	p-values
Gender	Male	199	91.2%	0.9000
	Female	565	91.4%	
Breadwinner	Yes	508	90.7%	0.1700
	No	253	92.9%	
Employed	Yes	78	91.2%	0.9494
	No	686	91.3%	
Pension	Yes	388	90.5%	0.2497
	No	374	92.2%	
Distance between clinics and households' houses	< 5 km	510	91.9%	0.3177
	= or > 5 km	254	90.3%	

There is no significant difference of awareness between males and females as the *p*-value is above 0.05. The same was observed between breadwinners and non-breadwinners, between the employed and the unemployed, between pensioners and non-pensioners, and between households living less than 5 km from the clinics and households living 5 km or further away.

that communities are mostly aware of the programme. The awareness of households regarding the ward-based outreach team programme in Tshwane health district was calculated at 88.8%.

It is recommended to increase the awareness of WBOT and the services offered by the programme to 100%. This can be done by the Community Health Workers extending their coverage and by involving media agencies such as newspapers, radio and television in order to introduce the programme to the communities that it will serve.

Ethical considerations

Ethical clearance was issued by the Sefako Makgatho Health Sciences University Research Ethics Committee (SMUREC//114/2015: IR) and Tshwane health district. Anonymity and confidentiality were maintained throughout the research process and consent forms were signed by every participant. Participants were informed about their right to withdraw from the study at any time if they felt the need to do so.

Author contribution

All authors were involved in conception and design of the study. TB and GAO undertook analysis/interpretation of the data, drafting of the manuscript, and revised the manuscript critically for important intellectual content. All authors approved the version of the manuscript submitted for publication.

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Received: 19-04-2018 Accepted: 10-07-2018