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A MACRO LEVEL SOCIAL WORK PRACTICE; HEALTH PROMOTION PROGRAM FOR IMPROVING THE HEALTH STATUS OF SEASONAL AGRICULTURAL WORKERS IN TURKEY

MAKRO DÜZEYDE SOSYAL HİZMET UYGULAMALARI; TÜRKİYE DE MEVSİMLİK TARIM IŞÇILERININ SAĞLIĞINI GELİŞTİRME PROGRAMI

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Research Article

ABSTRACT

The agriculture, which is the second largest sector of employment in the world and Turkey, will maintain its importance due to the food supply and provision of input to industry. The majority labour force of sector meets the seasonal agricultural workers (SAWs). Maternal-infant and general mortality and morbidity rates were at least 3.5 times higher in MSFWs than in general population of Turkey due to lack of access public health services. We developed a macro level social work intervention including planning and policy, community capacity development and social advocacy strategies to decrease health inequalities named Health Promotion Project of Seasonal Agricultural Workers (HPPSAWs) by using an operational epidemiological design with the objectives of (1) determining the health status and predictors of ill health in designing appropriate interventions, (2) developing new mechanism for access to public health services, and 3) integration of proven interventions into the system to protect right to life of SAWs.

Keywords: Seasonal agricultural workers, macro level social work, health promotion

ÖZ

Tarım sektörü dünyada ve Türkiye'de ikinci ana sektördür ve gıda ihtiyacının karşılanması ve endüstriye hammadde girdisi açısından önemini korumaya devam edecektir. Sektör işgücü ihtiyacının çoğunluğunu mevsimlik tarım işgücü ile karşılamaktadır. Mevsimlik tarımda çalışanların halk sağlığı hizmetlerine erişim güçlüğü nedeniyle hastalık, erken ölüm ve anne/bebek ölümleri genel nüfusa göre yaklaşık 3,5 kat daha yüksektir. Bu nedenle, sağlıkta eşitsizliği azaltmak için makro düzeyde sosyal hizmet müdahalesiyle politika belirleme ve planlama, toplumsal kapasiteyi geliştirme ve sosyal savunuculuk stratejilerinin kullanıldığı 'Mevsimlik Tarım Çalışanlarının Sağlığını Geliştirme Projesi' hazırlanmış ve yürütülmüştür. Operasyonel araştırma yöntemiyle yürütülen projenin amaçları; (1) sağlık durumunu ve belirleyicilerini saptayarak uygun müdahale programı geliştirme, (2) halk sağlığı hizmetlerine erişim mekanizması geliştirme, ve 3) mevsimlik tarımda çalışanların yaşama haklarını korumak için etkisi kanıtlanan müdahaleleri sisteme entegre etmedir.

Anahtar Kelimeler: Mevsimlik tarımda çalışanlar, makro düzeyde sosyal hizmet müdahalesi, sağlığı geliştirme

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INTRODUCTION

A society's health level is determined by biological factors (*age*, *gender*, *genetics and nutrition*); physical environmental factors (*air*, *water*, *housing conditions*, *exposure to chemicals*, *noise*, *public safety*, *and solid waste etc.*); social and cultural determinants (*socioeconomic status*, *education*, *early childhood experiences*, *lifestyle behaviours*, *child raising norms*, *unemployment*, *social aid*, *social exclusion*, *and social control*); working environment; services including health, education, and social services; and by the existence of health and social services, food, and transportation policies (Berkman & Kawachi, 2000). In relation to the aforementioned factors, differences in health status arise between countries, regions, and within regions (WHO, 2003). Based on human rights-based approach, the social worker uses macro-level interventions to develop programs that provide access to public health services to address health disparities and to work on relevant legal / structural regulations.

1.1 billion or 34 percent of the world's workers were employed in agriculture (ILO, 2013). An estimated three-fourths of the world's poor people live in rural areas, where most depend on agriculture for their livelihood (Martin, 2016). The agriculture sector will continue to maintain its importance due to the meeting of food need, providing input to the industrial sector, export and its employment opportunities, and its contribution to the ecological balance. However, workers in agriculture form one of the population groups in which health inequalities are most prevalent due to inadequate management of physical, chemical, biological, economic and social risks and difficulties in accessing health / social services. In the agricultural sector, women, children, elders, and seasonal agricultural workers including all three groups are a special risk group in terms of exposure time, quantity and continuous migration. (Arcury & Quandt, 2007; Donham & Thelin, 2006; Hansen & Donohoe, 2003; Hurst, Temrine, & Karl, 2005; International Labor Office, 2004; Şimşek & Koruk, 2011; Şimşek, Koruk, & Doni, 2012; Şimşek et al., 2015; Şimşek et al., 2016; Şimşek et al., 2017; Yentür et al., 2014; Yentür et al., 2015; Yentür et al., 2017a; Yentür et al., 2017b). SAWs are individuals who move from one place to another to work in agriculture, and who then return to their permanent residences at the end of the season. Although limited studies in this field suggest that pre- and postnatal care is very poor in women engaged in seasonal agricultural work, and that the cases of abortion, stillbirth, menstruation disorder, infertility, and adolescent pregnancy are rather high (Goldberg & Janssen, 2006; Lambert, 1995; Donham & Thelin, 2006; Şimşek et al., 2012). The risk of early mortality and morbidity is further aggravated by such factors as the migrant life, exposure to biological, physical, chemical sociocultural and economic factors, accidents, geographical and social isolation, lack of access to public health services including occupational health, and insufficient awareness of how to protect one's health (Priyadarshi et al., 2000; ILO, 2004; Donham & Thelin, 2006; Arcury & Quandt, 2007; Lerro et al., 2015; Stallones et al., 2016; Şimşek et al., 2012; Şimşek et al., 2016; Şimşek et al., 2017).

In Turkey, a limited number of intervention programs for accessing public health services of seasonal agricultural workers exist and these studies have been carried out for a certain period of time and in certain areas (Şimşek et al., 2012). In this study, it was aimed to provide access to qualified public health services of SAWs using macro-level social work interventions with a rights-based approach. As known, the convergence of social work and public health, helping to define the early characteristics of public health social work; willingness to investigate social factors as causes of poor health, combined use of epidemiologically informed casework, and community – level interventions, and policy advocacy and change efforts to bring about structural change (Ruth & Marshall, 2017). Knee reported that, social work, with its proven track record of leadership had an important role to play in strengthening public health (Caputi, 1978).

It is mentioned in the literature that education and opportunities that encourage macro level practices are important in order to meet the basic needs of vulnerable groups, although social work activities are mostly applied at micro level (Belcher & Tice, 2013). This study is expected to contribute also to the practices of public health social services in terms of macro level social work practices to prevent seasonal agricultural workers, which are one of the most disadvantaged groups, from disease / premature death and to access to public health services.

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Method

Macro-level social work intervention is essential in helping communities identify needs, involve organizing community efforts, design culturally responsive community-level interventions and policy advocacy to reduce health inequalities. In this macro level social work intervention, we used three strategies (Rothman, 2007). These are;

- ***Planning and policy*** (data driven; proposing and enacting particular solutions based on empirical facts),
- ***Community capacity development*** (assumes that change is best accomplished when the people affected by problems are empowered with the knowledge and skills needed to understand their problems, and then work cooperatively together to overcome them),
- ***Social advocacy*** (work towards institutions responsible for resolution of the problem to ensure social justice, that is, to ensure that seasonal agricultural workers have access to public health services)

The 'Project for Improving the Health of Seasonal Agricultural Workers' (TUR5R21A) was prepared by the first author using the macro-level social work strategies mentioned above with the operational epidemiological research method and managed in cooperation with the Ministry of Health in 2011-2015 having supported by the United Nations Population Fund (UNFPA).

The stages of the project;

1. Research on identification of health problems and needs for seasonal agricultural workers and their families,
2. Development of access mechanisms to public health services based on research findings and provision of cooperation discussing with related sectors,
3. Continuous monitoring and evaluation,
4. Integration of proven interventions into the system.

The effectiveness of planned intervention methods was determined by qualitative research methodology through interview forms / questionnaires using quantitative research method and in-depth individual interviews, when the effect of an intervention was proven, it was integrated into the system. To determine the effectiveness of the intervention methods, questionnaires were prepared for the Family Health Center (FHP), the Community Health Center (CHC) employees, health mediators, religious staff and district governors after an average of two years from interventios (Table 1). The main factor that reduced the response rate was rapid change of staff position. Interview forms were applied to seasonal agricultural workers and health mediators through face-to-face interviews. Through the qualitative research method, interviews were carried out with the institutions and persons who are the subject of the basic components of the intervention program. In this context, 33 in-depth interviews were conducted as shown in Table 1.

In order to determine the impact of the intervention program at community level, studies were completed in 261 households (96.6% response rate) and 270 households were scheduled to be reached (assuming a standardized effect size of 0.05 with a 0.05 error level) in neighborhoods where MTİ/201I study was carried out with 30 cluster sampling method.

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Table 1: Total Number Attended to Intervention Programs and Number of People Reached in Impact Assessment

Working groups	Total number	Sample	Response Rate (%)	N of indept interview
District Governor	86	69	80.2	2
Head of Community Health Center	77	38	49.3	6
Nurse/midwife in Family Health Center	95	50	52.6	5
Doctors in Family Health Center	62	38	61.3	2
Nurse/midwife in Community Health Center	223	108	48.4	6
Academicians at universities	11	NA	NA	3
Health Mediators	233	184	78.9	1
Religious staff	235	121	51.5	2
Agricultural envoys	187	47	25.1	2
Journalist	90	23	25.5	2
Seasonal agricultural workers *	270	261	96.6	2

*Sample of community based cross-sectional survey using 30 cluster sampling method

1. **Research on the determination of the health problems and needs of seasonal agricultural workers and their families**

This cross-sectional survey was conducted using the probability cluster sampling method in 1021 selected households, and focus groups for planning and policy strategy of macro level social work. While the median age for the SAWs was 18 years, it was approximately 30 years for the general population of Turkey. Of the SAWs, 72.1% of female workers aged 15–49 did not graduate from primary school phase one, while this ratio was 16.9% for Turkey in general; 58.2% of the SAWs were under the absolute poverty threshold; and 32.9% had access to safe drinking water, while no hygienic toilets were available in the agricultural fields. In this study, we note that families from South-eastern Anatolia emigrated to 48 different provinces of Turkey as seasonal workers. Migration is the most important factor when considering the provision of public health services (such as the health education, regulation of nutrition, safe water access, reproductive health services, control of communicable and endemic diseases, and provision of essential medicines), which are required to be delivered to all individuals of a society, especially for the prevention of diseases and premature deaths. It was also determined that 40.9% of the married women become mother before the age of 18, 39.5% of them preferred to give birth in less than 2 years. Also it was determined that 43.7% of the women have miscarriage and 18.5% of them had a story of still birth. 30.5% of the women indicated that they did not take antenatal care during their last pregnancy, 18.5% of them delivered at their home or in the field area. 46.3% of women in the period of the survey is still used any contraceptive method. Maternal-infant health and general mortality and morbidity rates were at least 3.5 times higher in SAWs than in the general population of Turkey. In terms of infant mortality, prenatal maternal health and consanguineous marriages were also important factors affecting the probability of the survival of infants.

In this base-line research, approximately 1 out of 5 individuals stated that they did not access health services because of financial issues, work load, usually working in short-term jobs such as hoeing, picking, not knowing the factors that make them ill and how to control these factors,frequently changing phone numbers,language barrier, working in agricultural areas during ASM's working hours, not going to routine follow-ups because they could not get their daily wages when they went to ASM during working hours,especially having a low level of education and reasons related to gender inequality, use of medicine brought from somewhere else, 'waiting to heal', and owning a vehicle while working in the field.

According to baseline research, of them, 20.2% did not know their family physician and the majority of family physicians did not visit or call the families for public health services such as vaccination, antenatal care, or screening. In the focus group meetings conducted with family physicians, we observed that the family physicians' awareness was insufficient towards

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health issues encountered by the families, difficulties dependent on life conditions were encountered in the system, and that it would be beneficial to conduct training programs and studies to improve the system. Legally, agricultural envoys' responsibilities in Turkey include providing safe transportation, payment of workers' wages, and organizing healthy living conditions in collaboration with local authorities. In focus group meetings none of them seemed aware of the regulations on their responsibilities related to environmental and health facilities (Şimşek et al., 2015). Quantitative and qualitative data were used, and 89.5% of women were exposed to violence that included the restriction of their human rights (Şimşek et al., 2016).

2. Development of mechanisms to access public health services collaboration with the related sectors

After determining access to public health services and obstacles based on empirical facts, SAWs health promotion program including solutions was developed by the first researcher to decrease health disparities in SAWs in 2012. This program was included: (a) Meetings at national and provincial government level for sharing the research findings and for the purpose of deciding on the determined interventions; (b) Strengthening the services for SAWs; (c) Strengthening the services for SAWs training clergymen on health risks and interventions necessary to prevent ill health; (e) Strengthening workers through health mediators training program; (f) and advocacy activities including scientific meetings, media trainings and lobbying to parliamentary members and committees (Şimşek & Çelik, 2016).

2.1. Meetings at national and provincial government level

Meetings were organized at the central government level with the participation of all public institutions, non-governmental organizations and academicians in provinces having the highest seasonal agricultural labor migration, and the technical staff participated in the meetings as well as the representatives of the organizations. At these meetings, the intervention programs identified to ensure access to health services and the control of the risks causing premature death and diseases for seasonal agricultural workers based on the results of the research were described. Intervention programs based on the results of the research attracted interest from all participants and their opinions and recommendations were received on each intervention program.

Monitoring protocols used in the presentation of public health services in Turkey, which is a country of agriculture, were reviewed and cooperation with the Ministry of Health Turkey Public Health Authority was conducted for the development of training modules in which agronomic factors were involved, modules were developed by identifying experts, monitoring cards were prepared for use on the croplands, each developed module was shared on the web to provide accessibility to materials by re-auditing with experts working in the application. In addition, brochures, videos, radio spots were developed for community education and put on the web page (www.mevsimlik tarimiscileri.com/ (in Turkish).

2.2. *Strengthening the services for SAWs*

Developed and tested training programs for strengthening service delivery within the context of operational research can be grouped under five headings. These are as follows:

i) Family Physician Centers (FPC) Training Program
ii) Community Health Center (CHS) Training Program
iii) Development of pre-graduation training module for the health professionals,
iv) Governors training,
v) Religious staff training.

All training programs were performed so as to enhance cognitive and emotional awareness, as the training in which seasonal agricultural workers directly participated. All subjects were structured according to health belief model based on research findings, and supported by written material.

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2.2.1. *Family Physician Centers (FPC) Training Program*

It is the approach that centralizes the health system and health care workers, which is the pre-requisite for ensuring access of SAWs' to public health services. Initial trainings were planned for FPC employees and the 'First Step Practice Guidelines', which includes the subjects such as the basic public health approach in the prevention of sickness and premature death, factors preventing seasonal agricultural workers from accessing public health services, the tasks of the FPCs, the importance of criminal and civil obligations in terms of seasonal agricultural labour, the management of health risks in the agricultural sector, counseling, prenatal-postnatal and during natal care, and banners and open letters have been developed to raise awareness. In 2012-2014, a total of 262 FPC employees received 2 days of trainings. When trainees were reached after an average of 2 years to assess the effect of the training, it was determined that approximately 50% of the health workers who were trained did not work in the areas where SAWs lived densely because of displacement. This finding is important in terms of indicating the provision of the continuity of training programs, taking into account the size of staff mobility. The health workers evaluated training positively with the statements such as "satisfying", "qualified", "beneficial", "informative", "stimulating". While all assessed the prepared guide as useful, 25% reported that the material was effective on its own, and 75% reported that face-to-face training was needed to be supported with materials.

2.2.2. Community Health Center (CHC) Training Program

In order to start mobile health services in agricultural areas, 300 health personnel from 48 provinces were trained starting from the provinces with the most dense seasonal labour force migration between 2012-2015. All of the trainees found face-to-face trainings of 2 days each useful and necessary and reflected on their service delivery, reporting that the training materials were useful. Trainings have facilitated empathic communication with SAWs and the management of risks related to person and environment. In impact evaluation of training, besides increasing the knowledge and skill of health workers, it was found that the motivation such as "***something can be done, and only you can do it***" was important. Strong impact of knowledge, skill and motivation was observed at all stages of service delivery. In the evaluation study performed in 2015, it was determined that the number of seasonal agricultural workers who reached public health services in agricultural areas reached to 212,245 and that they received direct public health services such as vaccination, reproductive health care services, health education and counseling, provision of clean drinking water, provision of collection of garbage, teaching of toilet building, safe pesticide applications and first aid training. Almost half of the trainees had no difficulty in service delivery; basic determinants were;

- Flexible working hours,
- Existing of health mediator in their working areas,
- Having local administrators trained.

The other important finding is that the training of the CHCs were activated other sectors. After the impact of the program was identified, on 5 February 2015, the article on services to be provided to seasonal agricultural workers by Community Health Centers was added to the Community Health Center and Subsidiaries' Regulation and the working hours, which were an important obstacle to access to the service, were rearranged by flexible work practice. Taking into consideration the mobility of health workers and the necessity of training, the topic of 'presentation of public health services to seasonal agricultural workers' was added to the Ministry of Health's standard training program. The statement of a nurse based on in-depth individual interviews is given below;

'We would see the tents in the croplands, we just call them as people from the Southeast coming to pick the product, I never thought it was about us. This training has broken down the wall between us and agricultural workers, and I learned that there is much that I can do. About 2000-3000 people are coming to our CHC district. We provide mobile service in the cropland nearly every 2 weeks. This year I met with 2 health mediators. They made our works easier and more useful. When a pregnant, a baby was unvaccinated or has a problem related to water or vector, when they are ill, they immediately call from my mobile phone. We usually go in the evening when their work is over, when it rains or on the day when they do not go to work, they wait for us. I can say that we were more successful this year' (CHS Nurse). (Şimşek et. al., 2013).

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2.2.3. Development of Pre-graduation Training Module

Awareness trainings to FPC and CHC employees resulted in a new dimension. Through these trainings and feedback, it has been decided that health workers should be trained in pre-graduation period on how to provide health services to groups who are to live and work in disadvantaged conditions such as seasonal agricultural workers in their basic occupational training. With this requirement, the "pre-graduation training module" was prepared. The improved module has been tested at the Schools of Medicine and Health of 6 different universities. The pre-graduation module was considered as 'very meaningful, useful and necessary'. When the way that the module application worked was evaluated, it was often used the statement of 'in the pre-graduation period, the telling of public health practices on a group at risk was beneficial for the students'.

2.2.4. Muhtar Awareness Trainings

Within the government system in Turkey, the elected administrator of the village/neighbourhood legal entity is the muhtar, whose duty is to ensure that the residents have access to the public services under the legal regulations. Within the scope of the project, trainings were organized for all the muhtars of the neighbourhoods where the seasonal agricultural workers were concentrated in the 2 provincial centers having given heavy seasonal agricultural labour force migration. In addition, a brochure about the services to be offered especially to the seasonal agricultural workers titled ***'The Muhtar is a Bridge for the Community to Reach to the Service'*** was prepared by the muhtars (www.mevsimliktarimiscileri.com). In the evaluation study, it was determined that the majority of muhtars or hiz family members worked as a seasonal worker. In 2012-2013, it was observed that they made an intensive study especially about population registration. They also played an important role in reaching agricultural envoys.

2.2.5. Trainings of Material Development and Awareness for District Governors

The findings of the needs identification research showed that a strong inter-sectoral co-operation at the provincial / district level is required to be provided for seasonal agricultural workers to have access to public health services. In legal regulations, with the duties of the administrators being defined, a guide on the relevant legal arrangements and practical ways of preventing disease / premature death and a brochure entitled 'Prevention of Diseases and Premature Deaths is a Legal Responsibility' were prepared, and awareness trainings were given to the administrators of the relevant public institutions, especially governors and district governors. In the scope of operational research, 201 administrators participated in the training program and 86 of them were assistant governors and district governors. It was reported that developed materials would be useful without face-to-face training, and would benefit more through face-to-face training. The guide developed for this reason was distributed to all provinces where the agricultural production was common.

87% of assistant governors and district governors reported that the training they got would be integrated into candidate district governor trainings and were integrated into the District Governor's Training Program of the Interior Ministry after the project.

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2.2.6. Training of Religious Staff

The reason for the inclusion of religious staff in this project is to ensure the participation of men upon the answers 'God knows, if it is our destiny, it happens' and 'these things are women's problem' given as the reasons for seasonal agricultural workers' diseases and premature deaths in the MTI/2011 research. Within the scope of the research, "Religious Staff Health Guide" was prepared because "the place that religion covers in the arrangement of everyday life is great and most of them go to Koran Courses outside the agriculture season" and 235 religious staff were given trainings in the neighbourhoods where seasonal agricultural workers live densely. In in-depth interviews, the guide prepared within the scope of the project was described as "well prepared, understandable, comprehensive". They stated that they learned the health dimension of the subject through the health education they took and that they learned how to fight "wrong beliefs" thanks to this knowledge. They stated that consanguineous marriage and marriage under age 18 were generally widespread in this group and that this prevalence was reinforced by the tradition that was supposed to be religious knowledge, but that it could be changed by such efforts.This finding has shown the necessity of performing training constantly at local level in cooperation with Religious Affairs Directorate and Public Health Directorates.

2.3. Strengthening Seasonal Agricultural Workers

As stated in the research findings, two different programs have been developed and implemented under this component due to the low level of education of women and men, the inability of one of two women to refer to health care without the permission of the elders of the family and the lack of information on the control of the factors leading to the illness due to the high level of external control in managing the person's life, low controls on their health, and inadequate access to preventive health services (Şimşek et al., 2015; Şimşek et al. 2016; Şimşek & Çelik, 2016).

2.3.1. Health Mediators

The findings of the research showed that a new model was necessary to ensure the dissemination of health information as a culture in daily life, increasing of demand for public health services, and learning by taking healthy behaviours as the role model. For this reason 'health mediator training program' was developed. For this purpose, a guide titled *'Healthy Living Guide'; The Golden Rules of Protecting from Diseases'* was prepared, and **233** people were trained as health mediators. The 4-year follow-up study showed that the education status of health mediators increased, the consanguineous marriage, the incidence of domestic violence and the frequency of illnesses decreased, and the knowledge and behaviors for prevention of illnesses increased significantly. Approximately 30,000 families of seasonal agricultural workers were informed by health mediators about prevention of diseases between 2012-2015, and these persons were provided to refer to the services of pregnancy, puerpera, baby follow-up and early diagnosis-treatment services. It has been decided to become a "job" of these studies which are done by taking into consideration the effective actions of the health mediators on the field, the collaborations they developed with the health workers and successes of all these in ensuring access to the health services of the SAWs, and it has been presented to the Ministry of Labor and Social Security by having made job descriptions. Based on the impact evaluation, it was determined that being health mediators between 30-40 years of age, having the majority to be women with some male health mediators and knowing Turkish are the main determinants of success.

2.3.2. Agricultural Business Mediator Trainings

In Turkey, the person who is legally responsible for establishing the working relationship between the employer and the seasonal agricultural worker and **making the necessary applications for the establishment of the workers' places of residence in accordance with the conditions of health and shelter and then following the process is** the agricultural business mediator (Regulation on Business Mediation in Agriculture, 2010). In the needs identification research, it was found that majority of the agricultural business mediators were not registered with İŞKUR and that they did not know legal regulations. During the registration and documentation of the agricultural business mediators, a pictorial guide to the agricultural business mediators was prepared (Agricultural Business Mediator Guide) and by performing a pilot work, **187** agricultural business mediators were trained. Especially because the training was given suitable to the daily practice, it was evaluated as 'very useful'

and they all had their official records as agricultural mediators.

2.3.3. Development of Adult Literacy Module

Due to the high rates of illiteracy in families working in seasonal agriculture, the 'Health-Themed Adult Literacy Module' was developed in cooperation with the GAP Regional Development Administration. The module was prepared to include risk factors and their control causing seasonal agricultural workers' premature death and diseases and integrated into the system http://www.gap.gov.tr/upload/dosyalar/pdfler/saglik_temali_okuma_yazma2.pdf.

2.4. Advocacy Work

2. 4.1. Press employees training

Press employees were trained to facilitate access to the service by ensuring that the results of the research were disseminated so as to actuate the public institutions. 'Health Journalism Guide for Accurate and Effective Health Communication' was prepared so as to provide seasonal agricultural workers to access to public health services for use in the trainings. After the program, it was observed that the news having appeared in the local media increased, and that these news were as to actuate the relevant sectors and inform the society. While programs were being developed, the need to provide detailed training related to reporting on disadvantaged groups was identified and the recommendation to integrate them into training programs was frequently notified.

2.4.2. The TBMM Research Commission Advocacy and Consulting

In 2015, the Seasonal Agricultural Workers Research Commission was established with the joint proposal of all political parties in the TBMM. The project coordinator, who was the first author, was actively involved during the commissioning of the Commission's work and also actively engaged in advocacy by consulting the commission. A comprehensive, multidimensional and participatory report was prepared by the Commission for access to all public services. The Commission's work were shared in written and visual media in detail, awareness of both the report and the topic was raised and it made a significant contribution to advocacy work. The components proven to be effective in the project and described in this article were detailed in the recommendations section of the report and they were shared by all the sectors by the TBMM and the recommendations were requested to be fulfilled (*Grand National Assembly of Turkey, 2015).*

2.4.3. Poster and Oral Statement Presentations At Scientific Meetings

The first researcher and academicians on the project team presented numerous posters and oral statements in public health and social service congresses. It was evaluated among successful studies in international congresses, especially in public health congresses. As a result, awareness increased in many faculty members, assistants and graduate students. In particular, the increase in theses also provided important information for developing evidence-based practices.

3. *Impact Evaluation of the Program at the Social Level*

In November 2015, a cross-sectional study was performed with 30 cluster sampling methods (211 households) to determine the social impact of the intervention program announced within the "Developing the Health of Seasonal Agricultural Workers" program. The universe of the study was formed by 11 neighbourhoods in Adıyaman and Şanlıurfa City Centers, where the seasonal agricultural workers mostly reside. The results of the research were given in Table 2 in comparison with the results of the needs identification research, which was the first step of the program. It is observed that the greatest advance is in the frequency of knowing the family physician, the frequency of the family physician's calling, access to mobile health services in agricultural areas, access to prenatal and postnatal care services, delivery in hospital, frequency of not approving short-term maternity of two years, the frequency of using withdrawal method, the frequency of learning sexually transmitted infections and the pesticide harms (Table 2).

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Table 2. Comparative Indicators According to Before and After Intervention

Variables	MTİ/2011	MTİ /2015
The percentage of knowing of family physicians	79.8	97.9
Percentage of being called by family physician / family health worker	14.7	41.3
Percentage of mobile health services utilization in agricultural areas	0.01	28.8
Percentage of women not paying attention to their health	32.5	18.5
Percentage of already pregnant women	13.8	11.2
Percentage of pregnant women who did not receive antenatal care in their last pregnancy	26.0	5.4
Percentage of women who did not receive postnatal care	76.9	17.8
Percentage of women who want to have children over 4	45.1	38.8
Percentage of men who want to have children over 4	53.0	40.2
Percentage of women supporting birth at short intervals than two years	38.7	9.1
Percentage of men supporting birth at short intervals than two years	53.1	10.3
Percentage of women who approve motherhood for the age of 18 and under	31.7	21.7
Percentage of men who approve motherhood for the age of 18 and under	5.3	7.9
Percentage of women who approve fatherhood under the age of 18	13.3	7.8
Percentage of women who had tetanus vaccination in their last pregnancy	46.4	81.3
The percentage of women who gave birth at home/cropland	27.2	3.2
Percentage of women who currently use contraceptive methods	46.3	59.7
Percentage of women using the withdrawal method	13.1	6.9
Percentage of women using needle method	1.5	28.7
Percentage of women who heard about sexually transmitted infections	28.3	91.0
Percentage of men who heard about sexually transmitted infections	57.7	92.7
Percentage of women knowing the harms of pesticides	9.3	18.3

In individual interviews, it was seen that, firstly, the demand for public health services increased and self-confidence on "agricultural labour" was developed in general. They also emphasized that not only their own but also the service providers (such as doctors, nurses, district governors) interests increased.

> "We did not know that much 2-3 years ago. For example, the kids could randomly go to the toilet anywhere. Now there is no such thing. **We build toilets**, we build separate **bathrooms,** we pay attention when we disinfect croplands, we take the pregnants to the doctor immediately, for example. **In an emergency situation we are taught where to call.** For example, we used drugs that we took away with us more consciously"(MTI, female).

> "... there are so many differences. For example, I went to my family doctor on the day I would go to Ordu. My own son was ill, I took him. Thank that doctor, he was so interested. So if a person has a son, he can not be that much. The doctor said if you have a problem there you can call. **I can direct you there** so. Thank goodness we did not have a problem" (MTI, female).

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'.. "At first, health workers would not come to croplands. Now they come to the tents. Previously they did not have water, bath, toilet or anything, they made built. They help us. They have been coming for 2-3 years. They came to the tents and drank our tea" (MTİ, female).

DISCUSSION AND CONCLUSION

According to the National Association of Social Workers (NASW), social work is defined as a profession that works to enhance the well-being of all people and promote social justice and social change on behalf of client populations. To achieve social justice, social workers seek to interrupt systems of discrimination and oppression through a number of activities, such as direct practice, community organizing, social and political action, and policy development (NASW, 2015). However, the current literature suggests that the profession's focus on social justice and social action are weakening, replaced by individualism and therapeutic interventions (O'Brien, 2010). This study has used macro-level social service intervention method to ensure access to public health services for seasonal agricultural workers, who constitute the busiest labour force of the agricultural sector. This program in operational research design were contained three strategies of community intervention approach called macro social work methods; ***planning and policy***, ***community capacity development*** and ***social advocacy*** (Rothman, 2007).

Several conclusions can be drawn from this research. Before passing on to them, if the problems can not be solved with the available resources, a social worker working in the field decides the macro-practices and proceed in line with the core strategies of macro social work intervention by setting up a team and a fund. First, the first step in the social work intervention at the macro level is to be able to identify the problem of the target group well and do research to be able to develop solutions based on the evidence. In the survey conducted to determine the health status and needs of seasonal agricultural workers, it was found that early death and disease rates were high due to low socioeconomic status, constant relocation, living in rural areas, migrating and working with family members, and uncontrolled occupational risks. The root cause was determined to be that the public health services were not structured according to the agricultural sector, taking into account such factors as geographical distance, low socio-economic level and the high level of the external control focus of the group (Şimşek et al., 2015; Şimşek et al. 2017). Similar results were obtained in different studies (Goldberg & Janssen, 2006; Donham & Thelin, 2006; Arcury & Quandt, 2007; Şimşek, Koruk, & Doni, 2012).

Second, it is important to establish intervention programs for the health system, the relevant sectors and directly for seasonal agricultural workers, to test the effectiveness of the intervention programs, and to provide inter-sectoral cooperation to integrate programs with proven effectiveness into the system, in order to access to public health services, which is the root cause. It has been seen that the training of health workers, administrators and especially district governors, religious staff, and media, training of health mediators so as to strengthen seasonal agricultural workers, and training of agricultural business mediators are essential components of a strong mechanism. After the impact evaluation; it is legally assured that the Community Health Centers located in the public health system will provide seasonal agricultural workers with mobile services in agricultural areas. Taking into account rapid staff mobility, a standardized training program for the continuity of trainings in provinces receiving and giving seasonal labour force migration has been developed and integrated into routine trainings. In addition, administrator trainings are integrated into the routine District Governor Training Program. In these trainings, the development of training materials with an interdisciplinary approach based on the needs of seasonal agricultural workers and on research findings and preparation of well-planned and feasible training modules for face-to-face training has been emphasized.

Third, their demand for public health services is low because of the low level of SAWs' education levels and disease prevention awareness. The formation of a demand to public health services is related to the level of awareness of the person, the level of control over his/her health, and the accessibility of the service. This program has shown the relevance of the model of training health care mediators in the context of community based public health services. Health care mediators have become "change agents - culture breakers" and they have begun to change from themselves. Health care mediators whose beliefs about their self-confidence, courage, and self-efficacy have increased have been regarded as the most important

outcome of the project that is reproducible in other areas. In the literature also, health mediators called LHW's provide promising benefits in promoting immunization uptake and breastfeeding, improving TB treatment outcomes, and reducing child morbidity and mortality when compared to usual care (Lewin et al., 2010).

Fourth, the training of agricultural business mediators has been quite successful. Because the legal duty of these persons is defined as the creation of a healthy living space, transportation, access to services and regular payment of wages. Within the scope of the project, they are provided to be trained by preparing a standard module. During the certification of agricultural business mediators, it was seen that training on access to public health services and first aid is beneficial.

Fifth, seasonal agricultural workers form a group with a high external control focus. Beliefs are important in the development of healthy behaviours. Although it seems to be very beneficial to include men in the process through religious staff on issues such as early marriage, consanguineous marriage, the importance of reproductive health services, social gender inequality, mitigation of patriarchal oppression,religion staff should be trained with pre- and post-graduation training by using educational materials prepared in these issues.

Sixth, qualitative posters and verbal reports that provide for increased scientific interest have made it possible to increase scientific evidence. The cross-sectional research of this project played an important role in establishing a commission at the TBMM level and the consultancy of the first author, the project coordinator, facilitated the integration of proven intervention programs into the service delivery system and the making of legal regulations.

As a result, the macro social work intervention has been effective in accessing to public health services of seasonal agricultural workers. It is considered to be beneficial for social workers working in Community Health Centers to use macro social work practices, especially by providing disadvantaged groups to access their human rights.

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