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Original Article



Evaluation of the Integrated and Comprehensive Elderly Care Program of the Ministry of Health Based on the CIPP Model

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Abstract

Introduction: The integrated and comprehensive elderly care program of the Ministry of Health in the city of Asadabad has been designed to maintain and improve the health of the elderly population. The evaluation of this program using the context, input, process, and product (CIPP) model is essential to determining areas where the program may need modifications or improvements.

Methods: The current descriptive-analytical research focused on evaluating the current elderly care program based on the CIPP evaluation model. The target population includes all employees of healthcare centers in Asadabad county. Data collection tools consisted of a two-part questionnaire, including demographic information and a researcher-developed questionnaire for evaluating the current elderly care program based on the four dimensions of the CIPP evaluation model. Participants meeting the study's inclusion criteria were selected through a census sampling method. After completing the questionnaires, the data were analyzed using SPSS 24 for further examination and analysis.

Results: The means ± standard deviations (SD) of the age of the participants was 34.84 ± 7.31 years, and 140 people (84.3%) were women. The mean ± of work experience was 10.75 ± 7.07 years. Based on the results of the field evaluation, the highest average score was related to the item "the need of the target group for the program", while the lowest average score belonged to "identifying the potential of other influential organizations in the implementation of the program". In the evaluation of the input field, the highest average score was associated with the item "asking questions of the target group during the implementation of the program to ensure learning", whereas the lowest average score was attributed to "budget and credit necessary for the program". In evaluating the scope of the process, the highest average score was related to the "evaluation of the program by the officials and executive personnel", while the lowest average score belonged to the item "updating the program according to the needs assessment and problems encountered". Based on output area evaluation, the highest and lowest average scores were associated with items "satisfaction with interest in work and commitment and work conscience" and "responsiveness of the program to the needs of the elderly", respectively. In the overall evaluation of the program, the highest average score belonged to "necessity of the program" and the lowest average score was related to "quality of program presentation".

Conclusion: Based on the current study results, the evaluation of the integrated and comprehensive elderly care program of the Ministry of Health using the CIPP model focuses on identifying the strengths and weaknesses of the program, taking into account the opinions of healthcare center staff in Asadabad province. Therefore, policymakers and officials can use these findings to improve the implementation of this program further.

Keywords: Integrated care program, Elderly, CIPP model, Evaluation



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Introduction

The aging population is indeed a natural process, but it presents unique challenges for various sectors of society, especially healthcare service providers. According to the World Health Organization's (WHO's) definition,

individuals aged sixty and above are classified as elderly in developing regions (1). The phenomenon of the increasing elderly population is considered one of the most significant economic, social, and healthcare challenges for healthcare providers, family members, and society in



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the 21st century (2). As per the WHO's report between 2015 and 2050, the proportion of the global population aged over 60 is expected to nearly double (from 12% to 22%). This demographic shift underscores the importance of addressing the healthcare needs and well-being of the elderly population to ensure a sustainable and healthy society (1). Based on the latest census data from the Statistical Center of Iran in 2016, the number of elderly individuals in Iran was 7.45 million, which has now increased to approximately 8 million individuals (9.9%). It is predicted that by the year 2050 AD, around 30% of the country's population will be elderly individuals. This demographic shift highlights the significant increase in the demand for healthcare services tailored to meet the needs of this age group (3). With the growing elderly population in Iran, there will be a substantial need for healthcare and medical services to cater to their specific requirements. It is essential for the Ministry of Health and other relevant authorities to plan and implement comprehensive elderly care programs to ensure the well-being and quality of life of this demographic group (1). The prevalence of chronic diseases, physical disabilities, mental illnesses, and other disabling conditions among the elderly population is higher than in other age groups. This highlights the need for providing health support, policies, and interventions to identify risk factors and protective factors for the health of this demographic. Prevention and control of issues related to the elderly require a multi-faceted approach that involves comprehensive healthcare services tailored to the specific needs and challenges faced by older adults (4). Each country's approach to providing clinical, hospital, and healthcare services for the elderly may vary based on the prevailing healthcare system, resources available, and specific demographic characteristics. It is essential to develop tailored strategies and interventions to address the unique health needs of the elderly population and ensure their well-being and quality of life (5). Therefore, it is necessary that the health care program for the elderly be community-based and aim to examine medical aspects and other health determinants (6). Providing quality health services to the elderly is a serious problem that requires common approaches and strategies. Failure to respond to these health needs can lead to problems that naturally require considering an extremely high budget for this population (7).

In Iran, the integrated service and care program is included in the health program for the elderly (8). In this program, minimal risk factors and key clinical signs are used for the early detection of the disease, referral, and appropriate treatment (8). In this program, how to evaluate the elderly in terms of priority physical and mental diseases based on the burden of diseases and immunization is taught, and in addition to simple diagnostic and treatment methods, ways to prevent diseases are also mentioned. The comprehensive care program for the elderly in the form of a program called Integrated and Comprehensive Geriatric Care Program was designed for doctors and non-

physicians, and implemented in all Iranian comprehensive urban and rural health service centers (9).

In the integrated and comprehensive care of the elderly, the elderly are evaluated as a priority in the country in terms of physical and mental illnesses. In this program, emphasis is placed on the prevention of common diseases and risks of old age with regard to priorities and proper education for the individual, family, and society, the correct and timely diagnosis and treatment of diseases and disorders, the prevention of complications and possible disabilities, the treatment of complications, and the timely referral and follow-up of referral results (9). The field of health care is constantly evolving, as are the needs of service users. Therefore, to determine how a program needs to modify or improve the process, a comprehensive evaluation seems necessary. In addition, the need to be accountable for the costs incurred in different national projects is a necessary context for expressing the concept of evaluation. Evaluation is a method to analyze the existing situation of the organization and to accurately recognize and value its performance based on the goals and applied resources (10). There are different approaches for evaluating health programs (11), of which management-based evaluation models are one of them. The management-oriented evaluation approach is one of the most important approaches to serve managers who are responsible for planning, implementing, and evaluating programs. Context, input, process, and product (CIPP) evaluation models of Staffelbeam and the Alkin evaluation model are two prominent approaches in management-oriented evaluation (12). The CIPP model has been distinguished from other models due to its comprehensiveness, continuity, and purpose, which is a guide to the decision-making function in program management (13).

The CIPP pattern, which was first introduced in 1971 by Stufflebeam, has been used all over the world as the most practical and well-known evaluation model in small- and large-scale, as well as short-term and longterm studies. It helps managers and program managers to get systematic feedback from the flow of affairs, prioritizes the important needs, and uses the available resources in the service of the best types of activities (14). The CIPP model provides a comprehensive framework for guiding projects, organizations, systems, and evaluating programs, which is suitable for new and complex programs. The use of this model provides the possibility of a comprehensive assessment of environmental conditions. The main advantage of using this model is its comprehensiveness and greater application than other evaluation models (15). The component of this model that is used to guide decisionmaking includes the evaluation of context, input, process, and product, and its accuracy and validity have been confirmed in evaluation studies (16,17). In this model, the main assumption is that the general goals of the program are clear and the evaluation criteria are certain. If the goals of the program are not clear in advance, in the CIPP model,

the needs and goals of the program are evaluated through the evaluation of the context. For this purpose, the existing and desirable state of the environment and its context are measured to determine the quality of the program's goals. Regarding the evaluation of the inputs of the program, it is determined to what extent the executive programs were in the direction of meeting the goals and were effective. In the evaluation of the process, a judgment is made about how the activities are implemented to reveal how much the activities enable the achievement of the goals. Finally, by means of this model, it is possible to judge the outputs and reveal the effectiveness of the program (18).

Therefore, there is a need to implement the integrated and comprehensive geriatric care program of the Ministry of Health, achieve predetermined goals, determine its success rate, and consider the importance of the elderly and the existing concerns in the field of achieving the educational goals of the Ministry of Health, Treatment, and Medical Education in this context. Considering that the program is new and since no research has so far been performed on the evaluation of this program, it seems necessary to perform an evaluation. Accordingly, the present study was conducted to determine the progress of the integrated and comprehensive elderly care program of the Ministry of Health using the CIPP evaluation model in Asadabad in 2024–2025.

Methods

The current research is of a descriptive-analytical type, which was conducted in 2024-2025 with the aim of evaluating the current integrated and comprehensive elderly care program of the Ministry of Health. The statistical population of this study included all employees of health centers in Asadabad. Among all the healthcare workers in the urban and rural health centers and health centers in Asadabad, 110 people who met the inclusion criteria and were willing to participate in the study were included in the study by the census sampling method. The criteria for entering the study were having an employment relationship with the Asadabad Faculty of Medical Sciences, being completely familiar with the integrated and comprehensive geriatric care program, and having at least six months of work experience in this program. On the other hand, the exclusion criterion included incomplete completion of questionnaire information. After receiving the letters of introduction from the relevant officials, the research team referred to the health centers in Asadabad and provided the designed questionnaire to the participants for completion after providing explanations about the objectives of the research. The data collection tool included 2 sections of demographic information and the CIIP evaluation questionnaire. The first part of the questionnaire consisted of questions about the demographic characteristics of employees, such as age, gender, and length of work experience. The second part was a researcher-made questionnaire for the evaluation of the integrated and comprehensive elderly care program

of the Ministry of Health. To design the questionnaire, first, by reviewing the texts of the libraries and reliable databases and according to the principles of the CIPP evaluation model, the repository of program evaluation questionnaire items was designed in all 4 areas of the CIPP model (background, input, process, and output) (19). This questionnaire included 62 questions in 4 areas, namely, context evaluation (with 11 questions), input evaluation (with 21 questions), process evaluation (with 16 questions), and output evaluation (with 10 questions). The final 4 questions of the questionnaire are related to the overall evaluation of the desired program.

In the evaluation part of the "field", questions 1-11 were included to examine the level of need for the program, and the desired goals for the implementation of the program were examined with questions such as the need for the existence of this program, the sufficiency of the field research conducted for the launch of this project, attention to the needs of the target group and the facilities of the beneficiaries, the alignment of the goals and plans of the project with scientific research, and the like. In the "input" area of the questionnaire, the input elements of the integrated and comprehensive geriatric care program will be evaluated to meet its goals, including elements of planning, equipment, budget, and human resources. For this purpose, questions 12-32 were designed for inclusion in the intended questionnaire. In the "process" area, judgements were made on how the activities are implemented by asking questions about the extent to which the flowcharts are implemented during the implementation of the program. In addition, the program was continuously evaluated by the officials and executive personnel, and efforts were made to change the attitude of the target groups of the program. Further, employees could participate in personal development workshops, and target groups were provided with prepared educational materials. Furthermore, other such matters were investigated, which included questions 32-48. In the field of "output", the level of satisfaction of the involved employees and the target group were evaluated based on the status of the implementation of the program (questions 48-58). The questions related to these four areas were answered by very high, high, medium, low, and very low options. Finally, 4 questions were designed for overall evaluation to check the quality and necessity of the program and the necessity of revising the program, and the questions in this area were answered with excellent, good, average, and weak options. The range of desirability for each question was determined in such a way that if the score of each area was within the range of 1-2-33, the index was unfavorable. The semi-optimal index and the optimal index were calculated in the ranges of 34.2-34.66 and 3.67-55, respectively. To evaluate the reproducibility of the questionnaire (10,20,21) in the present study, the reproducibility was determined by giving the questionnaire to a group of 10 people and repeating it after ten days. The Kappa coefficient calculated for all questions was above 0.7. The experts were used to confirm the validity of the questionnaire (22-24).

Results

Out of the total participants in this study, 110 employees of health centers answered the questionnaires. The mean ± standard deviation (SD) of the age of the participants was 34.84 ± 7.31 years. The mean ± SD of the caregivers' work experience was 10.75 ± 7.07 years. Based on the results of the study regarding the evaluation of the context, the highest average score was related to the item "to what extent does the target group need this program?", while the lowest average score belonged to "the potentials of other influential organizations in the implementation of the program have been identified and invited to cooperate". More details are provided in Table 1.

According to the results of the evaluation of the input domain (Table 2), the highest average score belonged to the item "audiences are specified in this program", whereas the lowest average score was related to "the budget and credit necessary for the program are considered".

Table 3 presents the evaluation results of the process area. The highest average score was related to the item "Have the target groups asked questions to ensure learning while teaching the program?" while the lowest average score was associated with the item "the program will be updated according to the needs assessments and problems encountered".

Based on the results of the evaluation of the output area (Table 4), the highest average score belonged to the item "are you satisfied with your interest in work and commitment and work conscience" while the lowest average score was related to "the program meets the needs of the elderly".

The results of the overall evaluation of the program indicated that the highest mean score was related to

"necessity of the program" whereas the lowest mean score belonged to "quality of program presentation" (Table 5).

Discussion

The present study was conducted to evaluate the integrated and comprehensive care program for the elderly of the Ministry of Health using the CIPP evaluation model in Asadabad in 2024-2025. In the conducted surveys, no study has focused on the evaluation of the integrated and comprehensive care program for the elderly of the Ministry of Health using the CIPP evaluation model. However, programs in the world and Iran, including the maternal health program in the field of primary health care (25), the educational program of premarital counseling centers (26), achieving educational goals of periodontics and oral health groups (27), the nursing service program for Parkinson's patients in Australia (28), the suicide prevention program in Kaohsiung, Taiwan (29) and the community diabetes management program in Thailand (30), have been evaluated using the CIPP model. Examining the average evaluation score in all areas of the context, input, process, and output of the integrated care program for the elderly revealed that the evaluation status in most dimensions of the context, input, process, and output of the program was relatively favorable or semi-optimal. Based on the results of the present study on the evaluation of the integrated and comprehensive elderly care program in the context of the CIPP model, it was determined that the highest mean belonged to the item "to what extent does the target group need this program?" while the lowest average was related to "the potentials of other influential organizations in the implementation of the program have been identified and invited to cooperate". Accordingly, from the point of view of the employees of the health centers in Asadabad, the target group's need for this program was high. The results of a study regarding the evaluation of the program

 Table 1. Distribution of the Frequency of Answers to Questions Related to the Integrated and Comprehensive Geriatric Care Program

Field Evaluation	Very much n (%)	Much n (%)	Low n (%)	Medium n (%)	Very little n (%)	M±SD
How much was the need for this program?	22 (20)	44 (40)	30 (27.3)	8 (7.3)	6 (5.5)	3.62 ± 1.05
To what extent has the field research been enough to launch this project?	6 (5.5)	22(20)	58 (52.7)	19 (17.3)	5 (4.5)	3.05 ± 0.88
To what extent have the needs of the target group and the facilities of the beneficiaries been considered in the design of the program goals?	5 (4.5)	26 (23.6)	51 (46.4)	222 (20)	6 (5.5)	3.02 ± 0.91
To what extent are the goals and plans of the plan in line with scientific research?	11 (10)	25 (22.7)	48 (43.6)	22 (20)	4 (3.6)	3.15 ± 0.97
To what extent is there a database to obtain accurate statistics and information about this program?	14 (12.7)	31 (28.2)	38 (34.5)	23 (20.9)	4 (3.6)	3.25 ± 1.04
To what extent are the cultural background and religious values related to the target group means?	10 (9.1)	25 (22.7)	52 (47.3)	21 (19.1)	2 (1.8)	3.18±0.91
How much does the target group need this program?	20 (18.2)	42 (38.2)	27 (24.5)	17 (15.5)	4 (3.6)	3.52 ± 1.07
To what extent are there specific rules and regulations to review, control, and monitor this program?	14 (12.7)	30 (27.3)	43 (39.1)	19 (17.3)	4 (3.6)	3.28 ± 1.01
To what extent is there a specific process to modify this program?	7 (6.4)	23 (20.9)	49 (44.5)	26 (23.6)	5 (4.5)	3.01 ± 0.94
To what extent are experienced experts available to implement the program?	10 (9.1)	26 (23.6)	50 (45.5)	19 (17.3)	5 (4.5)	3.15 ± 0.96
To what extent have the potentials of other influential organizations been identified and invited to cooperate in the implementation of the program?	5 (4.5)	21 (19.1)	40 (36.4)	33 (30)	11 (10)	2.78±1.01

Note. SD: Standard deviation.

 Table 2. Distribution of the Frequency of Answers to the Questions of the Input Area of the Integrated and Comprehensive Geriatric Care Program

Field Evaluation	Very Much n (%)	Much n (%)	Medium n (%)	Low n (%)	Very Little n (%)	M±SD
To what extent have the goals of the program been met in the program design?	19 (17.3)	28 (25.5)	33 (30)	23 (20.9)	7 (6.4)	3.26 ± 1.16
To what extent are the goals of the program clearly stated?	13 (11.8)	31 (28.2)	41 (37.3)	22 (20)	3 (2.7)	3.26 ± 1.00
How appropriate is the strategy to achieve the program's goals?	8 (7.3)	29 (26.4)	48 (43.6)	22 (20)	3 (2.7)	3.15 ± 0.92
To what extent is the evaluation method specified in this program?	9 (8.2)	35 (31.8)	48 (43.6)	13 (11.8)	5 (4.5)	3.27 ± 0.93
To what extent is the audience defined in this program?	22 (20)	28 (25.5)	44 (40)	11 (10)	5 (4.5)	3.46 ± 1.06
To what extent have the instructions been studied to implement the program correctly and in principle?	8 (7.3)	43 (39.1)	43 (39.1)	10 (9.1)	6 (5.5)	3.34±0.94
To what extent is the presented program consistent with the determined content?	5 (4.5)	33 (30)	51 (46.4)	17 (15.5)	4 (3.6)	3.16 ± 0.87
To what extent are the services provided by the program for the target groups?	6 (5.5)	26 (23.6)	45 (40.9)	28 (25.5)	5 (4.5)	3 ± 0.94
How much budget and credit is required for the program?	5 (4.5)	19 (17.3)	40 (36.4)	36 (32.7)	10 (9.1)	2.75 ± 0.99
To what extent does the program presented in the center meet the expectations and educational needs of the target group?	8 (7.3)	26 (23.6)	51 (46.4)	22 (20)	3 (2.7)	3.13 ± 0.91
To what extent have the educational materials been prepared according to the objectives of the program?	13 (11.8)	26 (23.6)	46 (41.8)	22 (20)	3 (2.7)	3.22±0.99
How effective and up-to-date are the educational resources and materials in the center?	9 (8.2)	25 (22.7)	54 (49.1)	15 (13.6)	7 (6.4)	3.13 ± 0.96
To what extent is the suitable environment for teaching the program considered?	9 (8.2)	26 (23.6)	45 (40.9)	15 (13.6)	15 (13.6)	2.99±1.12
To what extent is the interest of the target groups toward the program?	9 (8.2)	28 (25.5)	36 (32.7)	29 (26.4)	8 (7.3)	3.01 ± 1.07
To what extent are the order and sequence and the amount of service provision appropriate?	10 (9.1)	35 (31.8)	38 (34.5)	23 (20.9)	4 (3.6)	3.22±0.99
How familiar are you with the goals and content of the presented program?	14 (12.7)	27 (24.5)	47 (42.7)	15 (13.6)	7 (6.4)	3.24 ± 1.04
To what extent does your field of study match the program?	22 (20)	23 (20.9)	37 (33.6)	22 (20)	6 (5.5)	3.3 ± 1.16
To what extent do you have enough skills and experience to implement the program?	17 (15.5)	33 (30)	40 (36.4)	15 (13.6)	5 (4.5)	3.38±1.04

Note. SD: Standard deviation.

 Table 3. Frequency Distribution of Answers to the Questions of the Process of the Integrated and Comprehensive Geriatric Care Program

Field Evaluation	Very Much n (%)	Much n (%)	Much n (%)	Low n (%)	Very Little n (%)	M±SD
To what extent has the satisfaction of the target groups been checked during the implementation of the program?	10 (9.1)	21 (19.1)	48 (43.6)	23 (20.9)	8 (7.3)	3.02 ± 1.03
To what extent are the steps of the flowcharts implemented during the execution of the program?	8 (7.3)	32 (29.1)	40 (36.4)	26 (23.6)	4 (3.6)	3.13 ± 0.97
To what extent can the information obtained from the program be trusted?	11 (10)	23 (20.9)	50 (45.5)	20 (18.2)	6 (5.5)	3.12 ± 1
To what extent do officials and executive personnel evaluate the program continuously?	10 (9.1)	30 (27.3)	47 (42.7)	15 (13.6)	8 (7.3)	3.17±1.02
To what extent is the duration of the meetings suitable for the implementation of the educational program of the target groups?	6 (5.5)	33 (30)	42 (38.2)	21 (19.1)	8 (7.3)	3.07 ± 1
To what extent, in addition to transferring information, is there an effort to change the attitude of the target groups of the program?	9 (8.2)	19 (17.3)	49 (44.5)	24 (21.8)	9 (8.2)	2.95 ± 1.02
To what extent is it possible for you to participate in individual development workshops per year?	7 (6.4)	23 (20.9)	52 (47.3)	21 (19.1)	7 (6.4)	3.02 ± 0.95
To what extent are the target groups asked questions during the program training to ensure learning?	11 (10)	27 (24.5)	49 (44.5)	18 (16.4)	5 (4.5)	3.19 ± 0.98
To what extent are the target groups interested in participating in the program?	10 (9.1)	19 (17.3)	48 (43.6)	26 (23.6)	7 (6.6)	2.99 ± 1.01
To what extent are the prepared educational materials available to the target groups?	10 (9.1)	23 (20.9)	49 (44.5)	24 (21.8)	4 (3.6)	3.10 ± 0.96
To what extent is it possible for you to use new scientific sources in the content of the program?	7 (6.4)	27 (24.5)	56 (50.9)	14 (12.7)	6 (5.5)	3.14±0.91
To what extent do you pay attention to individual differences and previous knowledge of the target group in your training?	10 (9.1)	20 (18.2)	52 (47.3)	23 (20.9)	5 (4.5)	3.06 ± 0.97
To what extent are the problems encountered during the program recorded and maintained?	8 (7.3)	19 (17.3)	56 (50.9)	19 (17.3)	8 (7.3)	3 ± 0.96
To what extent are suggestions given to correct the weaknesses of the program?	6 (5.5)	23 (20.9)	45 (40.9)	31 (28.2)	5 (4.5)	2.95 ± 0.94
To what extent is the program updated according to the needs assessment and the problems encountered?	7 (6.4)	18 (16.4)	54 (49.1)	23 (20.9)	8 (7.3)	2.94±0.96
To what extent is there documentation related to program evaluations and actions?	9 (8.2)	29 (26.4)	50 (45.5)	14 (12.7)	8 (7.3)	3.15±0.99

Note. SD: Standard deviation.

Table 4. Frequency Distribution of Answers to the Questions of the Output of the Integrated and Comprehensive Geriatric Care Program

Field Evaluation	Very Much n (%)	Much n (%)	Much n (%)	Low n (%)	Very Little n (%)	M±SD
To what extent have the goals and plans of the presented plan been realized?	5 (3)	23 (13.9)	79 (47.6)	34 (20.5)	23 (13.9)	3.15 ± 1.01
To what extent does the program meet the needs of the elderly?	5 (3)	23 (13.9)	64 (38.6)	53 (31.9)	18 (10.8)	3.03 ± 1.11
To what extent is the importance of the program evaluated and measured by the target groups of the program?	3 (1.8)	20 (12)	76 (45.8)	53 (31.9)	13 (7.8)	3.04±0.91
To what extent has the program been effective in increasing the percentage of education of the elderly by the forces involved in the program?	4 (2.4)	24 (14.5)	87 (52.4)	37 (22.3)	12 (7.2)	3.15±0.98
How satisfied are you with your knowledge and skills in the field of elderly care?	10 (6)	45 (27.1)	89 (53.6)	17 (10.2)	5 (3)	3.32 ± 1.03
To what extent are you satisfied with your interest in work, commitment, and conscientiousness?	37 (22.3)	57 (34.3)	52 (31.3)	15 (9)	4 (2.4)	3.44±1.06
To what extent has this program been able to help improve the health of the target group?	8 (4.8)	31 (18.7)	83 (50)	34 (20.5)	8 (4.8)	3.15±0.99
To what extent is the target group satisfied with the program?	7 (4.2)	31 (18.7)	71 (42.8)	43 (25.9)	14 (4.8)	3.25 ± 1.05
How many case studies have been performed in this field?	2 (1.2)	21 (12.7)	83 (50)	43 (25.9)	16 (9.6)	3.05 ± 1.07
To what extent are the results of the conducted research used for the growth and improvement of the health of the elderly?	2 (1.2)	21 (12.7)	83 (50)	43 (25.9)	16 (9.6)	3.10±0.97

Note. SD: Standard deviation.

Table 5. Frequency Distribution of Responses to the General Evaluation Questions of the Integrated and Comprehensive Geriatric Care Program

Field Evaluation	Excellent n (%)	Good n (%)	Medium n (%)	Weak n (%)	M±SD
Overall, how do you rate the program?	8 (7.3)	50 (45.5)	37 (33.6)	15 (13.6)	2.46 ± 0.82
How do you rate the quality of the program?	10 (9.1)	37 (33.6)	47 (42.7)	16 (14.5)	2.37 ± 0.84
How do you rate the necessity of the program?	22 (20)	40 (36.4)	37 (33.6)	11 (10)	2.66 ± 0.91
How do you rate the necessity of revising the program?	20 (18.2)	35 (31.8)	41 (37.3)	14 (12.7)	2.55 ± 0.93

Note. SD: Standard deviation.

demonstrated the need and readiness of the community to participate in health activities according to the active health behaviors of the residents and existing local leaders (30). This finding has emphasized the important role of needs assessment as one of the main components of the planning process to identify the needs of individuals, groups, organizations, and societies. Therefore, needs assessment should receive more attention as a prerequisite for the success of the program (31).

In addition, the results of the present study in terms of evaluating the scope of input or input elements to the program of integrated and comprehensive care for the elderly indicated that the highest average was related to the item "the audience is specified in this program". In a study, it was reported that the audience of the program includes people with diabetes, healthcare workers, health volunteers, and community residents and their opinions regarding the use of different methods of health education and blood sugar control in the implementation of the blood sugar control program (30), which is in line with the findings of the present study. Therefore, the presenters of the program can attempt to make the program successful by identifying the audience and planning accordingly. Further, the results of the present study in terms of evaluating the scope of the integrated and comprehensive geriatric care program revealed that the lowest average was related to "the necessary budget and credit for the program have been considered". Regarding the consideration of the budget and credits for the implementation of the program

to evaluate the scope of the input, studies have examined the budget and necessary resources and the prominent role of receiving and allocating financial aid for the successful implementation of the desired programs (29-30). This issue is so important that a study reported that one of the reasons for the low effectiveness of the educational programs of premarital counseling centers was the lack of sufficient funds (26). Therefore, planning for the optimal allocation of financial resources to meet the desired goals of the country's healthcare sector is essential (32). Based on the results of the present study, the evaluation of the integrated and comprehensive geriatric care program in terms of the scope of the CIPP model process showed that the highest average was related to the item "during the training of the program, the target groups were asked questions to ensure learning". To evaluate the process scope of their program, some studies have investigated the assurance of learning of the target groups (33).

In a study, it was found that there are problems in the process of the educational program because the lack of learning of the learners contributed to the low effectiveness of the program (26). Moreover, in the current study, the evaluation of the integrated and comprehensive care program for the elderly in terms of the process area of the CIPP model showed that the lowest average was related to "the program is updated according to the needs assessments and problems encountered". A study in Australia has also identified problems and gaps in service provision in the evaluation of the scope of

the program process (28). The results of another study indicated the existence of problems such as the inability of the care provider to report on the various aspects of the care provided, as well as the lack of appropriate presentation of relevant indicators to managers and experts in this field (25). Considering that data recording plays an essential role in providing service and follow-up of people under care and provides the possibility of easy and quick retrieval of information in times of need (34), it is noteworthy that more attention should be paid to the program under review.

The results of the present study demonstrated that the evaluation of an integrated and comprehensive geriatric care program in terms of the scope of CIPP model output was such that the highest average was related to the item "you are satisfied with your interest in work and your commitment and conscientiousness". In a study, the outcome evaluation results showed that the caregivers of Parkinson's patients were satisfied with the value and usefulness of the program and acknowledged that their knowledge in the field of disease management has increased (28). The findings of another study revealed increasing the communication of service providers with people who reported suicide and providing them with the necessary advice regarding returning to life (29). In this regard, it should be acknowledged that if the empowerment of the system is achieved with work commitment, heart satisfaction, and practical commitment to the assigned tasks, it will be more lasting and will be possible at a lower cost (35). Additionally, in the present study, the evaluation of the integrated and comprehensive care program for the elderly in terms of the output area of the CIPP model showed that the lowest average was related to "a case study has been conducted in this field". In this regard, it should be emphasized that no study has so far been conducted in this respect, and the present study was performed to evaluate the integrated and comprehensive care program for the elderly. Finally, the results of the overall evaluation of the integrated and comprehensive geriatric care program indicated that the highest average belonged to "necessity of the program" while the lowest average was related to "quality of program delivery". This finding demonstrates that according to the employees of the health centers in Asadabad, the integrated and comprehensive care program for the elderly was a necessary program in the current conditions of the country, but in terms of the quality level of the program, it was not desirable. It has some weaknesses. Since the evaluation and improvement of the quality of provided services are considered the requirements of the macro-policies of organizations, it seems necessary to design a proper monitoring and evaluation system in order to determine the strengths and weaknesses, improve the quality of services, and train the human resources responsible for the needs of society (36).

Conclusion

Examining the average evaluation score in all areas of the

context, input, process, and output of the integrated care program for the elderly showed that the evaluation status in most dimensions of the context, input, process, and output of the program was relatively favorable or semioptimal. The results of this research revealed that the evaluation of the integrated and comprehensive elderly care program of the Ministry of Health, using the CIPP model, identified the strengths and weaknesses of this program according to the opinions of the employees of health centers in Asadabad. Therefore, policymakers and officials can use these findings to provide reasons for improving this program as much as possible. This study had some limitations. The evaluation of an integrated and comprehensive geriatric care program was investigated, but other parts were not evaluated. Among the suggestions presented to other researchers in this field, to evaluate and measure the evaluation of integrated and comprehensive elderly care programs of the Ministry of Health, old and traditional methods should be replaced with new evaluation methods such as this model so that they can identify the problems and weaknesses and attempt to resolve them.

It is also suggested that similar studies be conducted in other provinces and the results of the studies be compared with each other because, according to different cultural and ethnic conditions, access to facilities, and the differences in the evaluation system, the results of these studies may be different and can provide constructive solutions to policymakers and planners of the elderly program.

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Competing Interests

The authors declare that they have no competing interests.

Ethical Approval

This study was based on a research plan approved by the Ethics Committee of Asadabad School of Medical Sciences (IR.ASAUMS. REC.1403.003).

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References

- Rudnicka E, Napierała P, Podfigurna A, Męczekalski B, Smolarczyk R, Grymowicz M. The World Health Organization (WHO) approach to healthy ageing. Maturitas. 2020;139:6-11. doi: 10.1016/j.maturitas.2020.05.018.
- Michel JP, Sadana R. "Healthy aging" concepts and measures. J Am Med Dir Assoc. 2017;18(6):460-4. doi: 10.1016/j. jamda.2017.03.008.
- Statistical Center of Iran (SCI). Mean and Median Age of Iranian Population Based on the Results of the 2016 Census. Tehran: SCI; 2017. Available from: https://www.amar.org.ir/ Portals/1/News/files/Mean%20and%20Median%20Age%20 of%20Iranian%20Population.pdf.
- 4. Ahmed W, Muhammad T, Muneera K. Prevalence of early and late onset of chronic diseases and multimorbidity and its association with physical, mental and functional health among older Indian adults. BMC Geriatr. 2023;23(1):563. doi: 10.1186/s12877-023-04264-8.
- Ma B, Yang J, Wong FKY, Wong AK, Ma T, Meng J, et al. Artificial intelligence in elderly healthcare: a scoping review. Ageing Res Rev. 2023;83:101808. doi: 10.1016/j.arr.2022.101808.
- World Health Organization. Towards Policy for Health and Ageing [Internet]. 2013. Available from: http://www.who.int/ ageing/publications/alc-fs-ageing-policy.pdf. Updated May 22, 2015.
- 7. Vaishnav LM, Joshi SH, Joshi AU, Mehendale AM. The National Programme for Health Care of the Elderly: a review of its achievements and challenges in India. Ann Geriatr Med Res. 2022;26(3):183-95. doi: 10.4235/agmr.22.0062.
- Agarwal A, Lubet A, Mitgang E, Mohanty S, Bloom DE. Population aging in India: facts, issues, and options. In: Poot J, Roskruge M, eds. Population Change and Impacts in Asia and the Pacific. Singapore: Springer; 2020. p. 289-311. doi: 10.1007/978-981-10-0230-4_13.
- Ministry of Health Treatment and Medical Training of Iran. Guidelines on Integrated Care for Older People.
 2017. Available from: http://health.shmu.ac.ir/other/%D8%B1%D8%A7%D9%8A%20%D8%BA%D9%8A%D8%B1%20%D8%B4%D9%83.pdf.
- 10. Karimi I. Health Economy: Planning, Resource Allocation and Productivity. 1st ed. GAP Publication; 2006.
- Nilsen P. Making sense of implementation theories, models and frameworks. Implement Sci. 2015;10:53. doi: 10.1186/ s13012-015-0242-0.
- 12. Amin Khandaghi M, Ajam AA. Reflecting on the theoretical connection between educational evaluation approaches and educational quality models and its practical consequences. High Educ Lett. 2011;4(13):47-73. [Persian].
- Hosseini SN, Mohseni Band Pey A, Karami Matin B, Hosseini SA, Mirzaei Alavijeh M, Jalilian F. Comprehensive evaluation of Shahid Motahari Educational Festival during 2008-2013 based on CIPP evaluation model. J Med Educ Dev. 2014;9(2):56-68. [Persian].
- 14. Karimi Moonaghi H, Raffe S. The CIPP a model for evaluation. Navid No. 2022;25(82):91-101. doi: 10.22038/nnj.2023.64789.1347. [Persian].
- 15. Tseng KH, Diez CR, Lou SJ, Tsai HL, Tsai TS. Using the context, input, process and product model to assess an engineering curriculum. World Transactions on Engineering and Technology Education. 2010;8(3):256-61.

- Green ME, Ellis CL, Frémont P, Batty H. Faculty evaluation in departments of family medicine: do our universities measure up? Med Educ. 1998;32(6):597-606. doi: 10.1046/j.1365-2923.1998.00242.x.
- 17. Hakan K, Seval F. CIPP evaluation model scale: development, reliability and validity. Procedia Soc Behav Sci. 2011;15:592-9. doi: 10.1016/j.sbspro.2011.03.146.
- Bazargan A. Educational Evaluation. 3rd ed. Tehran: Organization for the Study and Compilation of University Humanities Books; 2015.
- Stufflebeam DL. CIPP Evaluation Model Checklist. 2007. Available from: http://wmich.edu/evalctr/checklists. Accessed March 17, 2012.
- Ebadi A, Sharif Nia H, Zareiyan A, Zarshenas L. Instrument Development in Health Sciences. 1st ed. Tehran: Jame-e-Negar; 2019.
- 21. Cook DA, Beckman TJ. Current concepts in validity and reliability for psychometric instruments: theory and application. Am J Med. 2006;119(2):166.e7-166.e16. doi: 10.1016/j.amjmed.2005.10.036.
- LoBiondo-Wood G, Haber J. Nursing Research: Methods, Critical Appraisal, and Utilization. 6th ed. St. Louis: Elsevier Mosby; 2006.
- Polit DF, Beck CT, Owen SV. Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. Res Nurs Health. 2007;30(4):459-67. doi: 10.1002/nur.20199.
- 24. Darsono R, Hardhienata S, Suhardi E. Increasing the effectiveness of caregiver education through program evaluation using the CIPP method. Univers J Sci Technol. 2023;2(1):335-51. doi: 10.11111/ujost.v2i1.113.
- 25. Firooznia R, Dargahi H, Khaledian Z, Jafari-Koshki T. Strengths and weaknesses of maternal health program evaluation tools in Iranian primary health care system. Payesh. 2018;17(5):521-30. [Persian].
- Hazavehei MM, Shirahmadi S, Roshanaei G, Kazemzadeh M, Majzoobi MM. Educational program status of premarital counseling centers in Hamadan province based on theory of reasoned action (TRA). J Fasa Univ Med Sci. 2013;3(3):241-7. [Persian].
- 27. Pakdaman A, Soleimani Shayesteh Y, Kharazi Fard MJ, Kabosi R. Evaluation of the achievement of educational objectives of the Community Oral Health and Periodontics Departments using the CIPP model of evaluation-students' perspective. J Dent Med. 2011;24(1):20-5. [Persian].
- 28. Jones B, Hopkins G, Wherry SA, Lueck CJ, Das CP, Dugdale P. Evaluation of a regional Australian nurse-led Parkinson's service using the context, input, process, and product evaluation model. Clin Nurse Spec. 2016;30(5):264-70. doi: 10.1097/nur.00000000000000232.
- Ho WW, Chen WJ, Ho CK, Lee MB, Chen CC, Chou FH. Evaluation of the suicide prevention program in Kaohsiung city, Taiwan, using the CIPP evaluation model. Community Ment Health J. 2011;47(5):542-50. doi: 10.1007/s10597-010-9364-7
- 30. Leesri T, Srisuphan W, Senaratana W, Vannarit T, Rerkasem K. CIPP model evaluation of a collaborative diabetic management in community setting. Glob J Med Clin Case Rep. 2016;3(1):29-34. doi: 10.17352/2455-5282.000030.
- Rahmani H. Educational Needs Assessment of Teaching Skills of Hormozgan University Faculty Members. Shiraz University; 2010.
- 32. Javaheri J, Farajzadegan Z, Shams B, Kelishadi R, Sharifirad G, Asgari M, et al. Evaluating healthy life style education to adolescents by means of direct method, parents, and teachers using CIPP evaluation model. Iran J Med Educ.

- 2010;10(3):219-28. [Persian].
- 33. Barzegari Esfeden Z, Dashtgard A, Ebadinejad Z. Evaluation of the realization of clinical nursing students' learning objectives using CIPP evaluation model. Iran J Nurs Res. 2019;14(5):66-72. [Persian].
- 34. Sharifian R, Ghazisaeedi M. Information registration in surgical special sheets for discharge patients in Tehran University of Medical Sciences teaching hospitals, 2005. Payavard Salamat. 2008;2(1):31-9. [Persian].
- 35. Mirheidari A. The role of commitment, work conscience, ambition, and hard work in organizational development: an Islamic perspective. Bi-Quarterly Research Scientific Journal in Educational Jurisprudence Studies. 2011;5(12):155. [Persian].
- Jafari Asl M, Chehrzed MM, Shafipour SZ, Ghanbari A. Quality
 of educational services from viewpoints of nursing and
 midwifery students of Guilan university based on SERVQUAL
 model. Res Med Educ. 2014;6(1):50-8. doi: 10.18869/
 acadpub.rme.6.1.50. [Persian].