

Developing and Evaluating Software Package for Common Ailments

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Abstract: *The study was framed with the objectives of developing a software package for common ailments ; evaluating the software package and incorporating the corrections. First step in the development of software package consists of drafting an effective programme. This was carried out by reviewing and synthesizing numerous material on natural remedies for common ailments and integrating them towards developing an interactive package. Reliable information were collected from various literatures and modified to suit the Indian conditions. Before framing the package Nutritional Professionals, Physicians, Dieticians were consulted and the necessary guidelines were obtained. The package was developed using PHP, MYSQL, HTML, JAVA SCRIPT, CSS applications. For the evaluation of software package ten subjects in each of the following categories were selected (Academicians, physicians, dieticians, public, post graduate students and software developers) in and around the campus. The necessary corrections suggested by the experts were incorporated.*

Keywords: Developing Software - herbal remedies- food healers - health care- evaluation of software

1. Introduction

Nature cure is a constructive method of treatment which aims at removing the basic cause of disease through rational use of elements freely available in nature. It's not only a system of healing but also a way of life, a complete revolution in the art of science and living.¹

Medicinal plants have important contributions in the healthcare system of local communities as the main source of medicine for the majority of the rural population .³ Out of the total 422,000 flowering plants reported from the world, more than 50,000 are used for medicinal purposes.⁴ About 60 per cent of the world population and 80 per cent of the population of developing countries rely on traditional medicine.⁵

The use of herbal medicine becoming popular due to toxicity and side effects of allopathic medicines. This led to sudden increase in the number of herbal drug manufactures .⁶ Herbal medicines as the major remedy in traditional system of medicine have been used in medical practices since antiquity. The practices continue today because of its biomedical benefits as well as place in cultural beliefs in many parts of world and have made a great contribution towards maintaining human health .⁷

Plants for health care form the largest segment of the biodiversity used by indigenous people for basic needs. The local uses of plants as a cure are common particularly in those areas, which have little or no access to modern health services such as the innumerable villages in India.⁸ By considering the above facts the study was framed with the following objectives

- Development of software package for common ailments
- Evaluating of the software package and incorporation of corrections

2. Materials and Methods

Phase I: Development of Software Package

Collection of Material for Development of Package

First step in the development of software package consists of drafting an effective programme. This was carried out by reviewing and synthesizing materials on numerous home remedies, hebal remedies, food healers , and nutrient sources for various diseases and integrating them towards developing an interactive package. Reliable information were collected from various literatures and modified to suit the Indian conditions. Before framing the package nutritional professionals, physicians, dieticians were consulted and the necessary guidelines were obtained.

3. Developing the Screens using the Resource Materials

After collecting the resource materials script was prepared in a note book indicating each slide in one page with necessary diagrammatic representations wherever required. In the next step screens were developed using PHP,MYSQL, HTML, JAVA SCRIPT, CSS applications.

This software package has been done in HTML as front end and PHP/MYSQL as back end. PHP is not a language it is server side scripting language developed by Danish Greenlander Rasmus Lerdorf. And all the texts were typed in text boxes, and pictures scanned were copied to the slides and each screens was developed by adjusting the font size, colour of the text, fore colour and background colour of the screens.

Remedies page indicates the common ailments and its natural remedies. Here two drop down menu has been provided. The first menu lists all the common ailments from A to Z where as the second one lists the mode of remedies like home remedies, herbal remedies and nutrient remedies

One can selected the ailment from the first drop down menu then for that particular ailment can select any of the three

remedies. There would be multiple remedies available for each ailment.

Phase II: Evaluating the Developed Software Package

1. Selection of Subjects for Evaluation

For the evaluation of software package ten subjects in each of the following categories were selected (Academicians, physicians, dieticians, public, post graduate students and software developers) in and around the campus. A well structured interview schedule was framed for the evaluation of the software package.

2. Preparation of the Schedule

In the software package, questions on natural remedy heading like ,For natural remedies do you feel that the home remedies enlisted in the software helps in the management? Are you already aware of the home remedies mention in the software package? Will you able to follow the procedure of home remedies enlisted in the software? After using this soft ware can you able to understand different vitamins and its importance in the management of common ailments? Can you relate the different ailments and its healing facts using

this software? In this soft ware package do you find any names of herbs unfamiliar to you? Common ailments enlisted are adequate? were included in the natural remedy column

3. Evaluation of the Developed Software Package and Feedback

Evaluation can focus on any kind of initiative such as programs, projects, sub- projects, and their components or elements.

The applicability of the software for wider use as determined by collecting suggestions from the evaluators of all categories including academicians, physicians, dieticians, public, post graduate students and software developers. The required modifications were carried out.

4. Results and Discussion

The findings of the study are presented in the following table

Software Evaluation Regarding Natural Remedies (N=60)

| Details on Natural remedies | E ₁ | | E ₂ | | E ₃ | | E ₄ | | E ₅ | | E ₆ | |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------|----|----------------|----|----------------|----|----------------|----|----------------|----|----------------|----|
| | Yes | No | Yes | No | Yes | No | yes | No | Yes | No | yes | No |
| Are the natural remedies listed able to follow? | 10 | 0 | 8 | 2 | 9 | 1 | 10 | 0 | 10 | 0 | 10 | 0 |
| Do you feel home remedies enlisted in the software helps for the management? | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 |
| Are you already aware of the home remedies mention in the software package? | 7 | 3 | 9 | 1 | 9 | 1 | 6 | 4 | 7 | 3 | 8 | 2 |
| Will you able to follow the procedure of home remedies enlisted in the software? | 8 | 2 | 6 | 4 | 9 | 1 | 10 | 0 | 10 | 0 | 10 | 0 |
| After using this soft ware can you able to understand different vitamins and its importance in the management of common ailments? | 7 | 3 | 5 | 5 | 6 | 4 | 10 | 0 | 9 | 1 | 10 | 0 |
| Is the Information regarding vitamins is adequate? | 9 | 1 | 4 | 5 | 5 | 5 | 10 | 0 | 9 | 1 | 10 | 0 |
| Can you relate the different ailments and its healing facts using this software? | 8 | 2 | 7 | 3 | 9 | 1 | 10 | 0 | 10 | 0 | 10 | 0 |
| In this soft ware package do you find any names of herbs unfamiliar to you? | 6 | 4 | 4 | 6 | 6 | 4 | 8 | 2 | 9 | 1 | 9 | 1 |
| Common ailments enlisted are adequate? | 8 | 2 | 6 | 4 | 7 | 3 | 10 | 0 | 10 | 0 | 9 | 1 |
| Are the availability of herbs easy for you? | 7 | 3 | 8 | 2 | 9 | 1 | 6 | 4 | 8 | 2 | 6 | 4 |

E1 –Academicians, E2 – Physicians, E3- Dietitians, E4- Public, E5- Post Graduate students, E6- Software developers

From the table it is evident that 80 per cent of physicians (E2), and dieticians (E3), 100 per cent of all other groups were able to follow the natural remedies suggested.

Hundred per cent of all groups felt that home remedies enlisted in the software helped them in the management of their ailments.

Above 70 per cent of all groups said they are already aware of the home remedies mentioned in the software package

Public (E4) and software developers (E6) unanimously agreed that they were able to understand different vitamins and its importance in the management of common ailments.

Except physicians (E2) and dieticians (E3), above 90 per cent of all others (academicians, public, post graduate

students and software developers) agreed that the information regarding vitamins is adequate.

More than 70 per cent of academicians (E1), physicians (E2) and dieticians (E3) as well as 100 per cent of public (E4),post graduate students (E5) software developers (E6) agreed that they were able to relate the different ailments and its healing remedies using this software.

Ninety per cent of physicians and seventy per cent of academicians felt that they were aware of the home remedies which were provided in the remedy column. Hence few more new remedies which are not common were included.

Fifty per cent of physicians felt that the information on vitamins is inadequate. So function, sources of all vitamins and minerals were added. Forty per cent of physicians felt

that common ailments enlisted are inadequate. Hence few more information on this was added.

5. Conclusion

This kind of health care package will help to develop a healthy community. A healthy community reflects a sense of mental and physical well being and is the foundation for achieving all other goals. Good health is often taken for granted but is essential for a productive society. For example, every community needs a healthy workforce upon which to build its economy. A great deal of ill-health in this country and elsewhere is due to ignorance of good nutrition, related aspects and its practical application.

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