

Development of valid and reliable online  
**health contents for lay audiences**  
as a prerequisite for efficient e-Health

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- Technology alters habits and thus leads to a change in life style.
- Today, ICT and, subsequently, Internet play a crucial role in this regard.
- Many people seek the answers for their questions through search engines.
- One of the most important types of questions they may have is those concerning their diseases and health conditions.
- **Already one in 20 searches on Google is about a health-related issue**



# Looking up health-related questions on the Web

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- When one has a bad headache, for example, he or the people around him immediately resort to search engines to look for explanation of this condition, its causes and types, and even ways to get over it.
- However, the problem is that the Internet is filled with a lot of information which are relevant or irrelevant, correct or incorrect, and reliable or unreliable.
- The question of reliability and validity can be the most important issue in this regard.

# Quality and Validity of Data & Information on the Web

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- High volumes of data available on the Web, on the one hand, and the fact that anyone having access to the Internet can increase these data, on the other hand, have led to a rather chaotic cyber atmosphere.
- Not only do these facts question the reliability and validity of these data, but they also call for the need to manage such vital information more properly



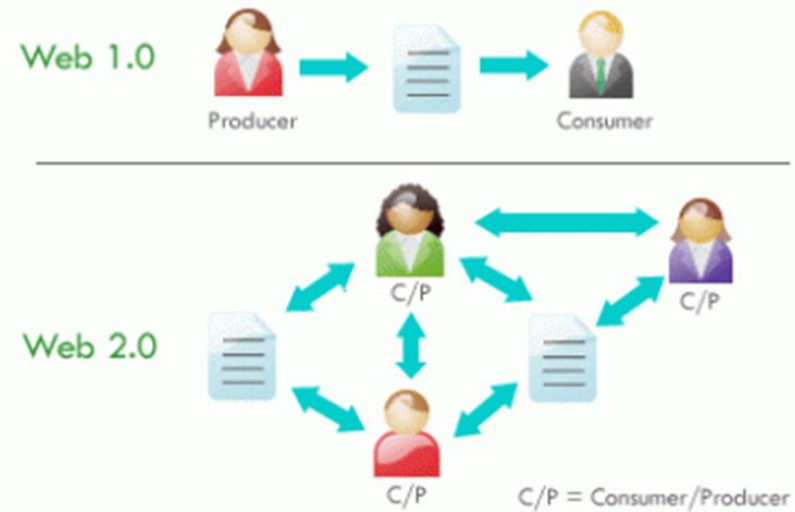


- When the search for the information about cancer in Farsi on Google was probed, only one of the ten results on the first page was from a reliable source like Hospitals, Medical universities, clinics or Ministry of health
- So Iranian Internet users need to have access to up-to-date, useful, effective, and concise information concerning their health

# Web 2.0 and Wikis

- A wiki is a Web application the content of which is collaboratively added, updated, and organized by its users.
- A wiki's content is editable through a Web page interface. The site's users create the content, define the relationships, and establish the links between the site's Web pages

## Web 1.0 vs Web 2.0

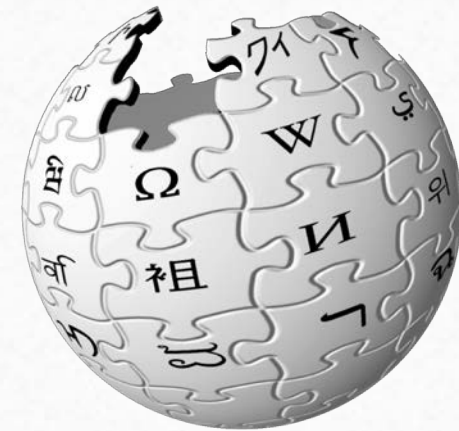




# Wikis & Wikipedia

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- The emergence of Web 2.0 and development of the cooperative culture in constructing the information on the Web have provided Internet users with many potential facilities which lead to democratization, on the one hand, and increase of availability and quality of knowledge, on the other hand.
- *Development of Wikis, particularly its unique instance 'Wikipedia', is a clear evidence of this fact.*



**WIKIPEDIA**  
*The Free Encyclopedia*



# Health 2.0, Education 2.0

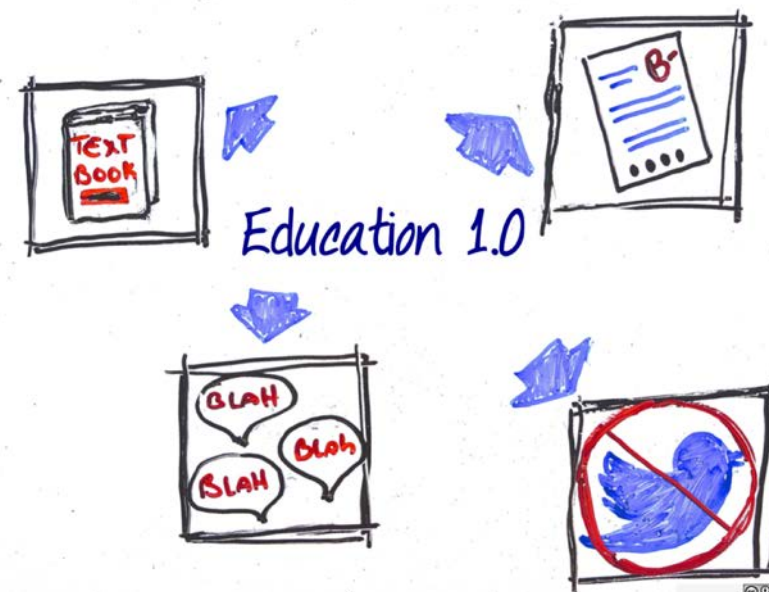
- Following Web 2.0, concepts like Health 2.0 and Medicine 2.0 are being designed and developed today

## Education 2.0:

*Learners as communicating, connecting, collaborating*



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# Collaborative Authoring

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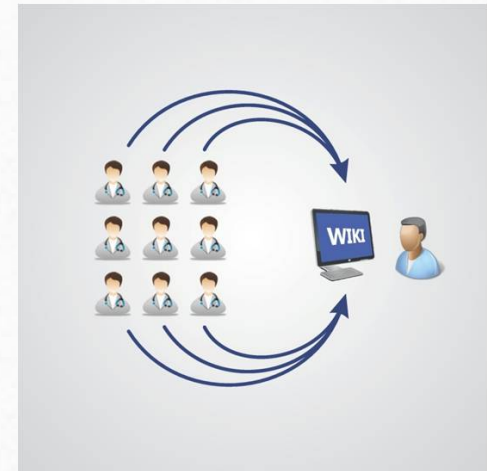
- Collaborative authoring concerns the activities involved in the production of a document by more than one author, the components of which involve pre-draft discussions and arguments as well as post-draft analyses and debates
- Another definition is "...any piece of writing, published or unpublished, ascribed or anonymous, to which more than one person has contributed, whether or not they grasped a pen, tapped a keyboard, or shuffled a mouse."
- A wiki is a tool for collaborative writing.



# Primary Framework

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- the main purpose of this effort is to design a Web-based responsible source for the people tending to search for health-related information on the Web.
- Considering the importance of validity and reliability of the health-related information, the primary purpose of this project was not to create a complete wiki but to set up its structure under the country's Medical Council or universities of medical sciences. In this project, all the doctors who are done with their general practice and final year medical students could be defined as the people who can enter the system and add or edit information on it.





# Salamat Wiki in its pilot implementation

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- The basic idea of this project and its primary framework were presented at Med-e-Tel 2012 in Luxembourg. It took about three years to implement the initial phase of project in small scale (final year medical students of a university).
- Finally Salamat wiki started as the first main project of eHealth Center of Tabriz Pars Clinic, which was supported by Community Medicine Group of Tabriz University of Medical Sciences and Information Technology Research Center of Tarbiat Modares University.
- For the first time, Salamat wiki was presented to the medical students in Nikoukari Ophthalmology University Hospital on January 7, 2015

# The first presentation meeting of Salamat Wiki

This project was named Salamat Wiki. *Salamat* in Persian means "health" and/or "healthy".





# Starting Salamat Wiki

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- With the approval of Tabriz University of Medical Sciences, introducing Salamat Wiki to the final year medical students was made possible in April 2015.
- Accordingly, a meeting was held every month for about 15 medical students who were invited to contribute in this project as content creators. **For those who volunteered to collaborate, we created accounts so that they could access the platform.**
- These meetings revolved around two topics: **Principles of training the community** (Identifying needs, providing content tailored to the needs and level of understanding of the community) and **Learning how to insert content into wiki pages.**

# Structure of Salamat Wiki

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- In the first stage, Salamat wiki focused on a brief description of diseases. Structure of the page concerning a particular disease consisted of the following items:
  - Title in Persian
  - Title in English
  - A descriptive picture
  - Category
  - Definition
  - Symptoms
  - Prevention
  - Treatment
  - Complications
  - More useful information
  - Resources





جستجو

جستجوی بیماری :



برای گسترش محتوای سلامت در فضای وب فارسی، دانشگاه علوم پزشکی البرز و «سلامت ویکی» تفاهمنامه همکاری امضا کردند.

#### بیماری های اخیر

توهم بیماری -

سندرم جنین الکلی

حالت خماری و نشنگی

فلج بل

#### دسته بندی بیماری ها

پزشکی قانونی و مسمومیت ها

طب فیزیکی و توانبخشی

## بیماری هنوخ شوئین لاین (هنوخ)

آخرین ویرایش: 1396/4/26

توضیحات کامل بیماری

بحث و گفتگو

تجربه بیماران



عنوان انگلیسی بیماری : henoch schonlein purpura

دسته بندی ها : کودکان

تعریف بیماری

پورپورای هنوخ-شوئین لاین یک بیماری واسکولیتی ( التهاب عروق) در عروق کوچک و متوسط با تظاهرات پوستی، مفصلی، گوارشی و کلیوی است. علت بیماری ناشناخته است اما عوامل مختلفی مثل عوامل محیطی (برخی عفونت های باکتریایی ، برخی داروها و گزش حشرات) ، عوامل ژنتیکی و برخی عوامل ایمنولوژیک می توانند در بروز این بیماری نقش داشته باشند.

سن شایع بروز بیماری 2 تا 8 سالگی می باشد اما در سنین بالاتر (حتی در سنین بالای 20 سالگی) نیز میتواند بروز پیدا کند.

پدید آورنده

مهرداد مهرآرا (دانشجوی پزشکی)

مشارکت کنندگان

مهرداد مهرآرا (دانشجوی پزشکی)

فریدون برادران باقری (پزشک)

اعضای ویکی

نام کاربری :

کلمه عبور :

ورود

بازیابی کلمه عبور



# Mechanism of content creating is as follows:

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- 1- The user logs in and creates a page titled, for instance, Diabetes, and then inserts information such as definition and symptoms.
- 2- Once this information is submitted, a second student can enter this page and add some other information to the symptoms and/or edits other information; such as a text regarding the treatment of diabetes.
- 3- This process can be continued by other doctors and medical students.

# Supervision & Supervisors

- The process of content creating in this website is under supervision of specialist physicians and each category of diseases has at least one supervisor.
- Actually these specialists are chief editors of their own fields.
- In this way, contents are gradually being more complete, and also website visitors could be sure that the health-related contents were written by reliable individuals.

ردیف	تصویر	نام و نام خانوادگی	تخصص	پروفایل
1		دکتر علیرضا اسلامپور	متخصص چشم پزشکی فلو شپ قرصه و سگمان قذافی	<a href="#">لینک به پروفایل</a>
2		دکتر علی برادران باقری	متخصص جراحی مغز و اعصاب	<a href="#">لینک به پروفایل</a>
3		دکتر آرش محقق	متخصص اعصاب و روان (روانپزشکی)	<a href="#">لینک به پروفایل</a>
4		دکتر ثمینه خسروشاهی	متخصص مغز و اعصاب (نورولوژی) فلوشپ بیماری های صرع	<a href="#">لینک به پروفایل</a>
5		دکتر مهستی علیزاده	متخصص پزشکی اجتماعی و پیشگیری	<a href="#">لینک به پروفایل</a>
6		دکتر محمدزکریا پزشکی	متخصص پزشکی اجتماعی و پیشگیری	<a href="#">لینک به پروفایل</a>
7		دکتر سید جلال الدین درخشانفر	متخصص داخلی - عفونی و گرمسیری	<a href="#">لینک به پروفایل</a>
8		دکتر بهنام اصغری	متخصص کودکان	<a href="#">لینک به پروفایل</a>
9		دکتر داود بادیرین	متخصص جراحی عمومی فلو تخصص جراحی کودکان	<a href="#">لینک به پروفایل</a>
10		دکتر مهرداد یآوری کیا	متخصص قلب و عروق فلوشپ اینترونشال کاردیولوژی	<a href="#">لینک به پروفایل</a>
11		دکتر حامد صباغ جدید	متخصص طب فیزیکی و توانبخشی	<a href="#">لینک به پروفایل</a>
12		دکتر علی بناگذار محمدی	متخصص پزشکی قانونی و مسمومیت	<a href="#">لینک به پروفایل</a>



# Access levels in Salamat Wiki

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Access level	Title	Duties
1 <sup>st</sup> level	Project management team	Overall supervision, create or validate users' account
2 <sup>nd</sup> level	Supervisors	Scientific monitoring of contents
3 <sup>rd</sup> level	Wiki administrators	Monitoring compliance with rules of wiki
4 <sup>th</sup> level	Content creators	Creating and editing wiki pages
5 <sup>th</sup> level	Patients and the public	Submission of their experiences about diseases

## After one year pilot implementation:

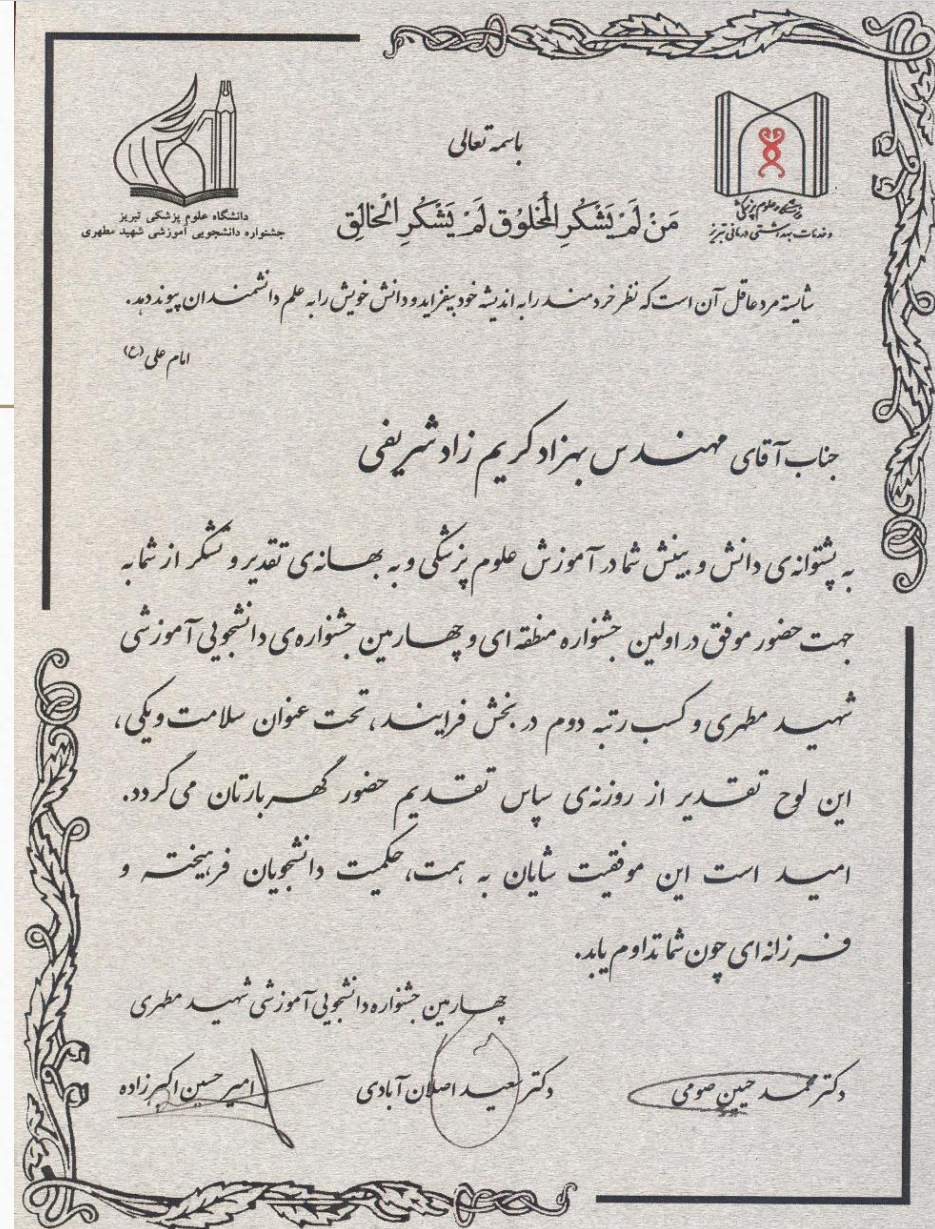
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- About 150 physicians and medical students registered and 90 topics of diseases were created in less than a year. Also 13 specialist physicians cooperated with Salamat Wiki as supervisors and chief editors of several categories of diseases in this period.
- Given the relative success of this project, a second collaboration agreement was signed with Alborz University of Medical Sciences to develop a similar process.



# Awards:

- Salamat wiki also won the 2nd Place Award for the medical education process at Shahid Motahhari Regional Educational Student Festival.





# Published Reports

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Has been published as one of successful experiences in:

***eHealth: A Step towards the Universal Health Coverage in Developing Countries***

Published in Brazil, 2017



ISBN 978-85-7862-711-9

## **eHealth:**

**A Step towards the Universal Health Coverage in Developing Countries**



**Editors**

**Malina Jordanova, Leonid Androuchko, Isao Nakajima**



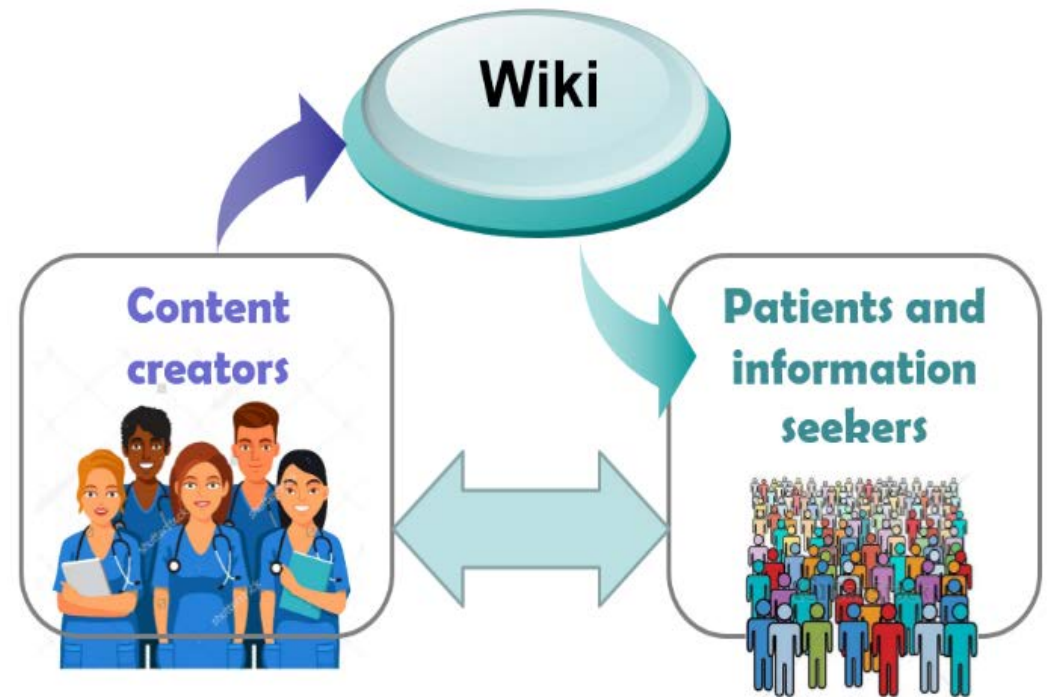


# Special Features of Salamat Wiki

- Focus on describing diseases
  - Physicians and medical students as content creators
  - Specialist physicians as supervisors of each category
  - Modular structure of disease description page
  - Inclusion of the name of the author and collaborators on each page
- Creation of a dynamic resume for each user
  - Ensuring the visitors of the reliability of the contents through linking the contents to the writers' profiles
  - Focus on presentation in scientific and educational organizations
  - Patient-oriented content creation

# Conclusion 1

- In addition to creating useful contents for patients and other information seekers,
- wiki could empower patients and medical students and increase interactions between patients and physicians





## Conclusion 2 : Main challenge o Wiki

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- The main challenge of a wiki is to **motivate** users to create contents. Stuart Maitland, the founder of Mediawikis, one of successful health wikis, emphasizes that
- “One of the big challenges when creating a wiki is encouraging contributors; after all, why would someone give up their time for free, to write a piece of information for someone that they will likely never meet?”

## Conclusion 3 : A Serious Recommendation

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- One of such motivating factors can be providing academic intensives for content creators.
- While universities allocate certain points for journal and conference publications in the academic promotion procedures, they do not value content creation in **lay language** on the Internet.
- Meanwhile, it is this simple information that can help educate the society, since the content in academic journals are not accessible to patients.
- *Thus, incorporating content creation in the academic evaluation systems would motivate the creators to produce content with the goal of getting promotion in academia rather than gaining direct financial benefits*



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**Thanks for you attention**